

3.0 SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT WHICH CAN BE MITIGATED

This section of the EIR identifies the environmental issue areas that have been determined to result in a potentially significant environmental impact, but will be mitigated to a level of less than significant. Each significant impact is discussed and analyzed in Section 3.1 – Biological Resources; Section 3.2 – Noise; and, Section 3.3 – Cultural Resources.

3.1 Biological Resources

The following analysis is based on the *Biological Technical Report for Peaceful Valley Ranch*, prepared by Helix Environmental Planning, Inc. (HELIX). The technical report is included as Appendix C of this EIR.

3.1.1 Existing Conditions

The subject site largely consists of rolling hills with elevations gradually increasing from west to east. One “blue-line” stream bisects the property from north to south, and a second-blue line stream crosses the southeast corner. Other ephemeral drainages occur throughout the site. Elevation onsite ranges from approximately 828 to 1,108 feet above mean sea level (amsl). Soils onsite consist of Fallbrook, Ramona, Cienaba rocky coarse, Vista rocky coarse, Placentia sandy loams, and Tujunga sand. Most of the property is agricultural land on which oats are grown.

Regional Conservation Context

The subject site lies within the Metro-Lakeside-Jamul segment of the County’s *Multiple Species Conservation Program (MSCP) Subarea Plan*. The property is outside of any Biological Resource Core Area (BRCA) or Pre-approved Mitigation Area (PAMA). As a result, conformance to the MSCP via conformance to the Biological Mitigation Ordinance (BMO) and *MSCP Subarea Plan* will address all Federal, State, and County conservation issues for species covered by the MSCP.

Regulatory Issues

Biological resources on the site are subject to regulatory review by the Federal government, State of California, and County of San Diego. The Federal government administers nonmarine plant and wildlife issues through the United States Fish and Wildlife Service (USFWS), while wetlands and Waters of the U.S. issues are administered by the U.S. Army Corps of Engineers (ACOE). California law relating to wetland, water-related, and wildlife issues are administered by the California Department of Fish and Game (CDFG).

Federal Government

Administered by the USFWS, the Federal Endangered Species Act (ESA) provides the legal framework for the listing and protection of species (and their habitats) that are identified as being endangered or threatened with extinction. Actions that jeopardize endangered or threatened species and the habitats upon which they rely are considered a “take” under the ESA. Section 9(a) of the ESA defines take as “to harass, harm, pursue, hunt, shoot, wound,

kill, trap, capture, or collect, or attempt to engage in any such conduct.” “Harm” and “harass” are further defined in Federal regulations and case law to include actions that adversely impair or disrupt a listed species’ behavioral patterns.

Sections 4(d), 7 and 10(a) of the Federal ESA regulate actions that could jeopardize endangered or threatened species. Section 10(a) allows issuance of permits for “incidental” take of endangered or threatened species. The term “incidental” applies if the taking of a listed species is incidental to and not the purpose of an otherwise lawful activity. Conformance with the MSCP is a Section 10(a) permit under the Federal ESA.

All migratory bird species that are native to the U.S. or its territories are protected under the federal Migratory Bird Treaty Act (MBTA), as amended under the Migratory Bird Treaty Reform Act of 2004 (FR Doc. 05-5127; USFWS 2004). This Act prohibits the take or transport of native migratory birds, or any part, nest, egg of any such bird unless allowed by another regulation adopted in accordance with the MBTA.

Federal wetland regulation (nonmarine issues) is guided by the Rivers and Harbors Act of 1899 and the Clean Water Act (CWA). The Rivers and Harbors Act deals primarily with discharges into navigable waters, while the purpose of the CWA is to restore and maintain the chemical, physical, and biological integrity of all Waters of the U.S. Permitting for projects filling Waters of the U.S. (including wetlands and vernal pools) is overseen by the ACOE under Section 404 of the CWA. Projects may be permitted on an individual basis or may be covered under one of several approved nationwide permits. Individual permits are assessed individually based on the type of action, amount of fill, etc. Typically, substantial time (often longer than six months) is needed to review and approve an individual permit, while nationwide permits are pre-approved if a project meets appropriate conditions. It is currently assumed that a Nationwide 39 Section 404 permit will be needed for the project.

State of California

The California ESA is similar to the Federal ESA in that it contains a process for listing of species and regulating potential impacts to listed species. Section 2081 of the California ESA authorizes CDFG to enter into a memorandum of agreement for take of listed species for scientific, educational, or management purposes. The MSCP is a 2081 permit under the state ESA.

The Native Plant Protection Act (NPPA) enacted a process by which plants are listed as rare or endangered. The NPPA regulates collection, transport, and commerce in plants that are listed. The California ESA followed NPPA and covers both plants and animals that are determined to be endangered or threatened with extinction.

The California Fish and Game Code (Sections 1600 through 1603) requires an agreement with CDFG for projects affecting riparian and wetland habitats through issuance of a Streambed Alteration Agreement. It is assumed that the project will require a 1602 agreement from CDFG.

The California Natural Communities Conservation Program (NCCP) Act (Section 2835) allows the CDFG to authorize take of species covered by plans in agreement with NCCP guidelines. An NCCP initiated by the State of California under Section 4(d) of the Federal ESA focuses on conserving coastal sage scrub to avoid the need for future Federal and State listing of species that depend on coastal sage scrub for habitat. The coastal California

gnatcatcher is presently listed as threatened under the Federal ESA, while several additional species inhabiting coastal sage scrub are candidates for Federal listing. The MSCP is considered a completed plan under NCCP.

County of San Diego

The County regulates natural resources via its Resource Protection Ordinance (RPO), whose regulations cover wetlands, wetland buffers, and sensitive habitat lands. Wetland habitats are defined per the County RPO, which requires that open space easements be placed over wetlands and wetland buffers and may restrict development on sensitive habitat lands. Sensitive habitat lands are identified by the RPO as lands that “support unique vegetation communities, or habitats of rare or endangered species or sub-species of animals or plants as defined by Section 15380 of the *CEQA Guidelines*.”

The CEQA and its implementing guidelines (*CEQA Guidelines*) require projects that potentially have significant effects (impacts) on the environment be submitted for environmental review. Significant impacts on the environment are typically mitigated through the environmental review process, in accordance with existing laws and regulations.

The Multiple Species Conservation Program (MSCP) is a comprehensive, long-term habitat conservation plan that addresses the needs of multiple species and the preservation of natural vegetation communities in San Diego County. The MSCP addresses the potential impacts of urban growth, natural habitat loss, and species endangerment, and creates a plan to mitigate for the potential loss of covered species and their habitat due to the direct impacts of the future development of both public and private lands within the MSCP area. The total study area encompasses 12 jurisdictions and consists of 582,243 acres, of which 43% (252,132 acres) is in unincorporated areas under the jurisdiction of San Diego County. The South County MSCP program was adopted by the County Board of Supervisors on October 22, 1997. The project site is located within the Metro-Lakeside-Jamul segment of the MSCP Subarea Plan.

The MSCP is a subregional plan under the Natural Communities Conservation Program, and is implemented through local subarea plans. The County’s *Subarea Plan* and its associated Implementing Agreement (IA) establish the conditions under which the County, for the benefit of itself and of public and private landowners and other land development project proponents within its Subarea boundaries, will receive from the USFWS and the CDFG certain long-term Take Authorizations (and an acknowledgement that the MSCP satisfies conditions established in the Section 4(d) Special Rule for the coastal California gnatcatcher) that will allow the taking of certain covered species incidental to land development and other lawful land uses which are authorized by the County.

The BMO is the mechanism by which the County implements the MSCP. The ordinance [Ordinance Nos. 8845, 9246 and 9632 (N.S.)] was amended in 2004 and was created to outline (a) the process for determining how mitigation for impacts is determined and, (b) to establish specific mitigation requirements for impacts on certain species. The intent of the BMO is to promote the preservation of biological resources by directing development into areas that are outside of biological resource core areas, and by establishing mitigation standards that will apply to discretionary projects. Preservation or protection of such resources is meant to direct preservation toward land to be combined into “contiguous areas

of habitat or linkages.” The County requires avoidance of impacts on 80 percent of County Group A and B sensitive plants.

Methodology

Literature Search and Surveys

Sensitive biological resources present or potentially present in the project impact area were identified through a literature search of the CDFG’s California Natural Diversity Database (CNDDDB). Field surveys were conducted onsite, and offsite where improvements are proposed along SR 94 and the monitoring well location, by HELIX Environmental Planning, Inc. (HELIX) biologists, who performed vegetation mapping, general botanical and zoological surveys, and surveys for rare and sensitive plant and animal species. The HELIX field work included habitat assessment and protocol surveys for the Federally listed endangered Quino checkerspot butterfly *Euphydryas editha quino* (QCB); protocol surveys for the Federally listed threatened coastal California gnatcatcher (*Polioptila californica californica*); and focused surveys for the burrowing owl (*Athene cunicularia*), a California Species of Special Concern. An assessment of the subject site determined that the site does not possess habitat suitable for the Federally listed endangered arroyo southwestern toad (*Bufo californicus*). A formal wetland delineation was also conducted on the site. Refer to Appendix C for additional information.

Wetland Delineation

A focused delineation was conducted in areas proposed to be impacted that were suspected to be jurisdictional wetlands and non-wetland Waters of the U.S. on July 9, 2003. All areas in the proposed impact areas with depressions or drainage channels were evaluated for the presence of jurisdictional areas. Each area was inspected according to ACOE wetland delineation guidelines.

Survey Limitations

Limitations to the surveys were few. Most plants occurring onsite were likely observed as a result of the number of visits made to the site throughout several seasons. The general zoology survey did not include trapping for rodents or reptiles, some species of which are highly likely to occur but were not observed. Because surveys were performed in daylight, nocturnal animals could not be directly observed. Additionally, some species occur in such low numbers that they can easily be missed. For these reasons, when field surveys are not feasible or warranted, other means such as database searches, habitat requirements, and knowledge of species distribution were used to determine the probability that other sensitive species may be present.

Vegetation Communities

An ephemeral drainage, portion of which supports riparian vegetation, bisects the property from the north to the south, and an intermittent drainage crosses the southeastern corner. The property supports a total of 12 vegetative communities, onsite which include agriculture (106.0 acres), Diegan coastal sage scrub (27.4 acres), disturbed coastal sage scrub (2.2 acres), and disturbed habitat (9.5 acres), which cover 81 percent of the property; Refer to Table 3.1-1. Other sensitive and non-sensitive habitat types onsite include coast live oak woodland (0.9

acres), riparian woodland (0.4 acres), mule fat scrub (0.03 acre), southern mixed chaparral (3.1 acres), non-native grassland (25.0 acres), eucalyptus woodland (0.4 acre), and non-native vegetation (0.9 acre). Developed areas total approximately 5.5 acres onsite.

Table 3.1-1, provides the acreages of each vegetation community in the project area. Figure 3.1-1 illustrates the vegetation community of the project area. The proposed offsite road improvements would occur within areas mapped as non-native grassland, disturbed/non-native vegetation and developed areas.

Coast Live Oak Woodland

Typically coast live oak woodland is characterized by only one dominant tree, coast live oak (*Quercus agrifolia*), which is evergreen and reaches 10 to 25 meters in height. The shrub layer is poorly developed, and the herb component is continuous and dominated by non-native grasses. Specifically, the understory consists of species such as bedstraw (*Galium aparine*), Italian thistle (*Carduus pycnocephalus*), and ripgut grass (*Bromus diandrus*). Several patches of coast live oak woodland totaling 0.9 acre occur in the northwestern, central, and southeastern portions of the site.

Riparian Woodland

Riparian woodlands and forests are communities that occur along stream courses and have a distinct tree stratum. Riparian woodlands are composed of winter-deciduous trees that require water near the soil surface. The dominant species that comprise the canopy of riparian woodlands are generally broad-leaved tree species. Three areas in the northwestern and central portions of the site contain riparian woodland, totaling 0.4 acre. This vegetation community occurs in association with the intermittent drainage and contains species such as willow (*Salix sp.*), western sycamore (*Platanus racemosa*), and mule fat (*Baccharis salicifolia*).

Mule Fat Scrub

Mule fat scrub is a shrubby riparian scrub community dominated by mule fat and interspersed with shrubby willows. This habitat occurs along intermittent stream channels with a fairly coarse substrate and moderate depth to the water table. Mule fat scrub totaling 0.03 acre occurs along the ephemeral drainage in the southeastern corner of the site.

Diegan Coastal Sage Scrub

Diegan coastal sage scrub is a vegetation community that is commonly characterized by drought-adapted subshrubs such as California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*) and white sage (*Salvia apiana*). The Diegan coastal sage scrub is scattered throughout the site with little to no connectivity between patches; the total amount of this habitat onsite is 27.4 acres. The northernmost portion of the property possesses the greatest quality and quantity of sage scrub present onsite. This sage scrub is dominated by California buckwheat, San Diego sunflower (*Viguiera laciniata*), and California sagebrush. The sage scrub in the south-central portion of the site is of moderate quality and is dominated by California sagebrush and spiny redberry (*Rhamnus crocea*). The

remainder of the sage scrub onsite is of lower quality, and although it contains many of the typical sage scrub shrubs (i.e., California sagebrush and California buckwheat), the shrubs are more widely spaced, and often the openings are completely filled in with large mustard (*Brassica sp.*) plants.

Disturbed Diegan Coastal Sage Scrub

Disturbed Diegan coastal sage scrub occurs in the western portion of the site in two areas, both of which are surrounded mostly by agriculture, non-native grasslands, and/or disturbed habitat. The patches in these areas total 2.2 acres. Disturbed sage scrub onsite is similar to coastal sage scrub, except that it contains a high percentage (at least 50 percent) of non-native grasses and forbs such as (but not limited to) bromes (*Bromus spp.*) and filaree (*Erodium sp.*). This community is of low quality for gnatcatchers.

Southern Mixed Chaparral

Southern mixed chaparral is composed of broad-leaved sclerophyllous shrubs such as chamise (*Adenostoma fasciculatum*), lilac (*Ceanothus spp.*), and scrub oak (*Quercus berberidifolia*) which can grow to six to ten feet tall and form dense, often nearly impenetrable stands. Southern mixed chaparral occupies 3.1 acres in the northeastern corner of the site. Characteristic species in this community are chamise, laurel sumac (*Malosma laurina*), spiny redberry, and mission manzanita (*Xylococcus bicolor*).

Non-Native Grassland

Non-native grassland is dominated by non-native grass species, but can also contain native grasses and native and non-native forbs. Non-native grassland onsite consists of introduced annual grasses, sometimes associated with species of native origin. Characteristic non-native grasses onsite are foxtail chess (*Bromus madritensis ssp. rubens*), soft chess (*Bromus hordaceus*), and schismus (*Schismus barbatus*). Some native species present in the non-native grassland include goldfields (*Lasthenia californica*), doveweed (*Eremocarpus setigerus*), and southern sun cup (*Camissonia bistorta*). Non-native grassland is scattered throughout much of the site, totaling 25.0 acres. Approximately 0.6 acre of non-native grassland occurs in the offsite area where improvements to SR 94 are proposed.

Non-Native Vegetation

Non-native vegetation included areas dominated by non-native tree species such as pepper trees (*Shinus molle*), as well as non-native shrub species and totals 0.9 acre onsite.

Eucalyptus Woodland

Eucalyptus woodland, as its name implies, is a woodland dominated by trees of the species *Eucalyptus*. There is typically little to no understory vegetation, as the chemical and physical characteristics of the leaf litter limit the ability of other species to grow. Eucalyptus woodland occurs on 0.4 acre adjacent to the streambed in the northwestern portion of the site.

Disturbed Habitat

Disturbed habitat includes land that has been cleared of vegetation or contains a preponderance of non-native plant species such as, but not limited to, mustard, yellow-star thistle (*Centaurea melitensis*), and wild radish (*Raphanus sativus*). Disturbed habitat primarily occurs along dirt roads, man-made berms, and the edges of developed land and agriculture, and totals 9.5 acres. In addition, approximately 0.15 acre of disturbed habitat occurs offsite at the location of the proposed monitoring well to the south in the Hollenbeck Canyon Wildlife Area.

Agriculture

The property is largely an active agricultural site, with a total of 106.0 acres of active agriculture onsite. The primary crop grown is oats, but there was formerly an organic vegetable farm in the central portion of the site that is now used as a horse corral. The organic vegetable farm ceased operation in August 2004.

Developed

Developed land consists of areas where permanent structures and/or pavement have been placed, preventing the growth of vegetation. Developed land onsite includes a paved road, two residences, horse facilities, and produce packing facilities, totaling 5.5 acres.

Sensitive Biological Resources

Sensitive Vegetation Communities

Seven vegetation communities (including vegetation communities with disturbed habitat) are considered sensitive by the County. These communities are coast live oak woodland, riparian woodland, mule fat scrub, Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, southern mixed chaparral, and non-native grassland.

Sensitive Plants

Two plant species identified as sensitive by the County were identified onsite: San Diego sagewort and San Diego County viguiera. A list of plant species observed onsite is provided in Appendix C of the Biological Technical Report.

In addition, 45 listed or sensitive plant species have the potential to occur onsite. Sensitive plant species that were not observed onsite but have potential to occur are listed in Table 3.1-2. A sensitive plant survey was conducted, and none of these species was found.

Sensitive Animals

A list of animal species observed onsite is provided in Appendix D of the Biological Technical Report. Eight animal species identified as sensitive by the County were identified onsite: Cooper's hawk, Bell's sage sparrow, northern harrier, California horned lark, loggerhead shrike, red-shouldered hawk, western bluebird, and great blue heron. Refer to Appendix E of the Biological Technical Report for an explanation of status and sensitivity codes. The locations of these observations are illustrated on Figure 3.1-1.

An additional 56 other sensitive animal species have the potential to occur onsite. Sensitive animal species that were not observed onsite but could potentially occur are listed in Table 3.1-3.

In addition, large mammals such as southern mule deer (*Odocoileus hemionus*) and mountain lion (*Felis concolor*) have the potential to use the site, although none was observed and no evidence was encountered, including scat or tracks, during project surveys. If either species does use the site, it is likely to be only occasionally.

Wetland Resources

ACOE, CDFG, and County jurisdictional/RPO wetlands areas occur onsite; refer to Figures 3.1-3, 3.1-4, and 3.1-5. ACOE and CDFG jurisdictional waters include the streambeds and associated vegetation. County jurisdictional/RPO wetlands include portions of the vegetated streambed along the ephemeral drainage through the middle of the site as shown on Figure 3.1-3.

ACOE Jurisdictional Waters

The site supports ACOE jurisdictional waters. These waters total approximately 1.31 acre of non-wetland Waters of the U.S.

CDFG Jurisdiction

CDFG jurisdiction onsite comprises 1.31 acre of ACOE jurisdictional area plus associated vegetation, including 0.9 acre of coast live oak woodland, and 0.4 acre of riparian woodland, 0.03 acre of mule fat scrub, and 0.04 acre of a single sycamore tree.

County Jurisdictional Wetlands

County jurisdictional/RPO wetlands onsite include 0.46 acre of coast live oak woodland, 0.36 acre of riparian woodland, 0.18 acre of vegetated streambed, and 0.24 acre of non-wetland water of the U.S. County jurisdictional wetlands are associated with the main drainage that traverses the site. The County jurisdictional wetlands are concentrated in three places onsite: south of the main drainage crossing, north of the main drainage crossing in the north-central portion of the site adjacent to the northern property boundary line, and in the extreme north-northwestern corner of the site. One isolated sycamore (approximately 0.04 acre) in an agriculture area has a canopy that overhangs the County jurisdictional RPO wetland and is considered to be a part of the wetland. However, the drainage in the southeast portion of the site is not designated as an RPO wetland because it does not have at least one of the County jurisdictional/RPO wetland characteristics which include: (1) at least periodically, the land supports predominantly hydrophytes (plants whose habitat is water or very wet places); (2) the substratum is predominantly undrained hydric soil; or (3) the substratum is non-soil and is saturated with water or covered by water at some time during the growing season each year.

3.1.2 Guidelines for the Determination of Significance

Significance guidelines to define significant impacts to biological resources have been established. These guidelines have been established in conjunction with Appendix G of the CEQA Guidelines, the Endangered Species Act, the Native Plant Protection Act, and the

County of San Diego's adopted plans and ordinances (including the MSCP) to ensure the guidelines are accurate and effective tools in determining impacts to biological resources. These guidelines have been included within these regulations because they are effective screening tools in determining impacts to biological resources. These guidelines are effective because they cover a range of possible scenarios where impacts to biological resources could be affected by the proposed project. For purposes of evaluating impacts in this EIR, the proposed project would result in a significant impact if it would:

- 1) Eliminate or substantially degrade a block of habitat considered essential to the local or regional biological environment such that it no longer provides the same function or value.
- 2) Implement activities within or adjacent to corridors, linkages, or other areas utilized for wildlife movement that would:
 - (a) Prevent wildlife from accessing areas considered necessary to their survival,
 - (b) Restrict wildlife from utilizing their natural movement paths, or
 - (c) Further constrain a narrow corridor by reducing width, removing available vegetative cover, creating edge effects, or placing barriers in the movement path.
- 3) Subject on- or offsite habitat and native wildlife to substantial edge effects, including:
 - (a) Post-construction noise levels in excess of 60 dB during daytime hours and 50 dB during nighttime hours,
 - (b) Artificial light in excess of 0.005-foot candles (half as bright as a full moon),
 - (c) A drawdown of the groundwater table of three feet or more below historic low groundwater table elevation (for groundwater-dependent species or habitat),
 - (d) Potential encroachment of any kind, including but not limited to clearing within preserved areas and unauthorized pedestrian, equestrian, or off-road vehicle traffic,
 - (e) Degradation of the habitat through unrestrained domestic pets, invasive plants, or animals,
 - (f) Water runoff that changes natural moisture levels and/or increases the spread of pollution and pesticides.
- 4) Cause the natural biological diversity and habitat associations to not be preserved in a contiguous, functional block, and thereby compromise the health and viability of the ecosystem.
- 5) Cause any of the following to occur to or within County jurisdictional/RPO wetlands or wetland buffers: removal of associated vegetation; grading; obstruction or diversion of water flow; change in velocity or siltation rate; placement of fill; placement of structures; construction of a road crossing; placement of culverts or other underground piping; any disturbance of the substratum; and/or any activity that may cause a change in species composition, diversity, and abundance.
- 6) Remove any component of native or natural habitat through grading, clearing, and/or other construction activities.

- 7) Degrade the value of habitat “moderately to significantly,” either immediately or in the long-term, as indicated by one of the following:
 A change in species composition, diversity, or abundance, or
 A decline in the value or function of the habitat.
- 8) Cause any direct, indirect, and/or cumulative impact that may be considered detrimental to the regional long-term survival of a Group II animal or County BMO listed Group C or D plant species.
- 9) Cause any direct, indirect, and/or cumulative impacts that may impact plant species listed as Federally or State-endangered or threatened, MSCP Critical Populations, MSCP Narrow Endemics, or County Group A or cause any impact that may be considered detrimental to the regional long-term survival of these species.
- 10) Direct, indirect, and/or cumulative impacts that may be considered detrimental to the regional long-term survival of a local population of an animal species listed as Federally or State-endangered or threatened, Species of Special Concern, MSCP Narrow Endemic, or listed as County Sensitive.
- 11) Implement grading, clearing, construction, or other activities (except for passive recreation) within 500 feet of occupied breeding or nonbreeding wetland habitat for the arroyo southwestern toad (*Bufo californicus*).
- 12) Implement grading, clearing, construction, or other activities (including passive and active recreation) within 4,000 feet of an active golden eagle nest during the breeding season (February 15 to July 15).
- 13) Include long-term or permanent development or active recreational uses within 4,000 feet of an active golden eagle nest.
- 14) Implement grading, clearing, and/or construction within the following distances and within the following time periods for one or more of these species:

Species	Distance from Occupied Habitat	Breeding Season
Coastal cactus wren	300 feet	February 15 to August 15
Coastal California gnatcatcher	300 feet	March 1 to August 15
Least Bell’s vireo	300 feet	March 15 to September 15
Southwestern willow flycatcher	300 feet	May 1 to September 1
Tree-nesting raptors	300 feet	February 15 to July 15
Ground-dwelling raptors	800 feet	February 15 to July 15

- 15) Remove substantial raptor foraging habitat.
- 16) Conflict with the goals or requirements of the MSCP, County *Subarea Plan*, or BMO.
- 17) Conflict with the requirements regarding wetlands, wetland buffers, or sensitive habitat lands, as outlined in the RPO.
- 18) Conflict with the goals and requirements as outlined in an applicable *Habitat Conservation Plan* (HCP), *Habitat Management Plan* (HMP), *Special Area Management Plan* (SAMP), or similar regional planning program.
- 19) Conflict with the goals and requirements of applicable Federal or State regulations, including but not limited to the Federal ESA, Migratory Bird Treaty Act, Bald Eagle Protection Act, Clean Water Act, Porter-Cologne Water Quality Act, and the California Fish and Game Code.

3.1.3 Analysis of Project Effects and Determination of Significance

Direct Impacts

Direct impacts would occur as a result of the project. Direct impacts would occur as the result of site development, fire-clearing activities within the limited building zones, and construction of onsite trails.

Sensitive Vegetation Communities

Impact 3.1.3-1: The proposed project would directly impact 50.9 acres of sensitive vegetation communities onsite, including 0.04 acre of oak root zone buffer (from a trail in open space), 22.8 acres of Diegan coastal sage scrub, 2.2 acres of disturbed Diegan coastal sage scrub, 3.1 acres of southern mixed chaparral, and 22.2 acres of non-native grassland; refer to Figure 3.1-2 and Table 3.1-4. Offsite road improvements to SR-94 would impact 0.6 acre of non-native grassland. Removal of any component of native or naturalized habitat through grading, clearing, and/or other construction activities would be considered significant pursuant to the County BMO and MSCP *Subarea Plan*, which require mitigation for such impacts.

In addition, the proposed project would impact 102.3 acres of agricultural land, 5.5 acres of developed land, 9.2 acres of disturbed habitat, and 0.6 acre of non-native vegetation. The project will result in a small area of offsite impacts as the result of the installation of groundwater monitoring well. The well is required as a result of mitigation requirements to monitor groundwater associated with the proposed project. The well would be located just south of the southern property boundary in the open space area managed by the California Department of Fish and Game (CDFG). The proposed monitoring well location is shown in Figure 3.1-2. Installation of the groundwater well would impact approximately 0.15 acre of disturbed habitat. Installation, monitoring, and maintenance of the well would require use of an existing dirt road for access. The applicant has been coordinating with CDFG regarding obtaining an easement in this area. Correspondence from CDFG is included in Appendix A of Appendix I of this report. These impacts, however, would not be considered significant since they would not occur to native or naturalized vegetation communities.

Sensitive Plant Species

The project will impact two plant species considered sensitive: San Diego viguiera (approximately 600 individuals) and San Diego sagewort (approximately 66 individuals). Neither species is listed by Federal or State agencies as rare, endangered, threatened, or as being a Species of Concern. They are, however, considered County Group D species, or uncommon plants of limited distribution but are not presently rare or endangered. Neither population are considered regionally significant and project impacts would not be detrimental to the regional long-term survival of the species. For these reasons, these impacts are considered less than significant.

Sensitive Animal Species

Impact 3.1.3-2: The proposed project may impact eight County-sensitive species that were observed on the site: Cooper's hawk, Bell's sage sparrow, northern harrier, California horned lark, loggerhead shrike, western bluebird, great blue heron, and red-shouldered hawk; refer to Figure 3.1-1. None of these species are listed as endangered or threatened under the Federal or State ESA. The northern harrier and Cooper's hawk are covered species under the MSCP. Impacts to individuals of these species would not result in impacts considered detrimental to the regional long-term survival of a local population and are therefore not considered significant. However, direct impacts to the avian species that may breed onsite (Cooper's hawk, Bell's sage sparrow, northern harrier, California horned lark, loggerhead shrike, and red-shouldered hawk) would be considered significant if it was determined that active nests occur onsite.

Jurisdictional Areas

The project would not impact any County jurisdictional/RPO wetlands and provides a required 25-foot or 50-foot buffer adjacent to these wetlands onsite; refer to Figure 3.1-3. An ephemeral drainage tributary to Jamul Creek (which flows only during periods of precipitation and briefly thereafter) traverses the project site. The drainage is encumbered by a flowage easement, limiting encroachment and development within the floodway stream, and portions of the drainage are subject to the provisions of the RPO. Two crossings are proposed with the project: one where Peaceful Valley Ranch Road will cross the ephemeral drainage, and a second in the southeastern portion of the site where a private driveway easement will cross the existing intermittent drainage. These drainage crossings have been designed to avoid impacts to RPO wetlands and therefore, impacts are not significant, and mitigation is not required; refer to Figures 3.1-4 and 3.1-5.

Impact 3.1.3-3: The project would impact 0.32 acre of non-wetland Waters of the U.S. under the jurisdiction of the ACOE as shown in Figure 3.1-3. Impacts to ACOE Waters would be considered significant because the project would impact wetlands protected under the federal regulations, including the Clean Water Act.

The project would impact 0.32 acre of CDFG jurisdiction that includes the 0.32-acre of ACOE jurisdiction. The other areas under CDFG jurisdiction onsite would not be impacted by the project and are included in onsite biological open space as shown in Figures 3.1-2 and 3.1-3. Impacts to CDFG jurisdiction would be considered significant because the project would impact wetlands protected under applicable state regulations, including the California Fish and Game Code.

Wildlife Corridors

The site lies outside of any identified regional or local wildlife corridor or linkage. Natural features onsite such as the creek beds draining the central and eastern portions of the site may provide for some local wildlife movement. This local wildlife movement would not connect with significant amounts of open space to the west, north, or east, but would connect with open space to the south. Given the fragmented nature of habitat north of the property and the limited habitat values onsite, this connection with open space to the south would serve primarily to maintain movement within fragmented habitat patches for predators such as coyotes. The project would not prevent wildlife from accessing areas considered necessary to their survival, restrict wildlife from utilizing their natural movement paths, or further constrain a narrow corridor by reducing width, removing available vegetative cover, creating edge effects, or placing barriers in pathways of movement. Therefore, project impacts on wildlife corridors and movement would be less than significant.

Indirect Impacts

Surface Water Quality

Water quality in riparian areas onsite or downstream could be adversely affected by potential surface runoff and sedimentation during construction. The use of petroleum products (fuels, oils, lubricants) and erosion of cleared land during construction could potentially contaminate surface water. Decreased water quality could adversely affect vegetation, aquatic animals, and terrestrial wildlife that depend on the surface water. Water runoff generated from onsite activities during project construction that increases the spread of pollution and pesticides would be considered a significant impact; however, during project construction, measures will be implemented to control erosion, sedimentation, and pollution that could impact water resources on- and offsite. The project will be required to comply with Sections 87.414 and 87.417 of Division 7 (Excavation and Grading) of the San Diego County Code, which requires erosion control measures. Prior to the commencement of grading, a Notice of Intent must be filed with the RWQCB for a National Pollutant Discharge Elimination System General Construction Storm Water Permit. Specific permit requirements include implementation of an approved Storm Water Prevention Plan, which requires best management practices for erosion and sediment control related to construction activities; refer to Section 4.1.3 for additional discussion of best management practices. Standard measures that may apply to the proposed project include:

- Surface drainage shall be designed to collect and move runoff into adequately sized natural stream channels or drainage structures.
- Erosion control measures associated with the project shall include techniques for both long- and short-term erosion hazards pursuant to direction by a hydrologic or engineering consultant. These are likely to include such measures as the short-term use of sandbags, matting, mulches, berms, hay bales, or similar devices along all pertinent graded areas to minimize sediment transport. The exact design, location, and schedule of use for such devices shall be determined by a hydrologic or engineering consultant.

- Native vegetation shall be preserved whenever feasible, and all disturbed areas shall be reclaimed as soon as possible after completion of grading. Native topsoil shall be stockpiled and reapplied as part of the site revegetation whenever possible.
- Use of energy dissipating structures (e.g., detention ponds, riprap, or drop structures) as deemed necessary by a hydrologic or engineering consultant shall be used at storm drain outlets, drainage crossings, and/or downstream of all culverts, pipe outlets, and brow ditches to reduce velocity and prevent erosion.
- A maintenance plan for temporary erosion control facilities shall be established. This will typically involve inspection, cleaning, and repair operations being conducted after runoff-producing rainfall.
- Removal and disposal of ground water (if any) encountered during construction activities shall be coordinated with the RWQCB to ensure proper disposal methods and locations under a General Dewatering Permit. This may involve specific measures such as removing excess sediment (through the use of desilting basins, etc.) and limiting discharge velocity.
- Specified fueling and maintenance procedures shall be designated to preclude the discharge of hazardous materials used during construction (e.g., fuels, lubricants, and solvents). Such designations shall include specific measures to preclude spill including proper handling and disposal techniques.

Impacts to surface water quality are considered less than significant, as the project would comply with the required regulations and best management practices.

Construction Noise

Impact 3.1.3-4: Construction noise would occur from grubbing, grading, and construction. Activities would be performed with appropriate permits and within the requirements of Section 36.410 of the County Code Noise Ordinance. Impacts would be significant if grading, clearing, or construction activities occur within 300 feet of tree-nesting raptors or 800 feet of ground-nesting raptors. (a red-tailed hawk nest is known to occur just offsite).

Grubbing, grading and construction noise would also result in a temporary impact on other local non-sensitive wildlife. Those activities may temporarily displace wildlife from the vicinity of the grading and construction; however, when the project is completed, wildlife is expected to return to areas close to residential lots, so this impact is considered less than significant.

Fugitive Dust

Fugitive dust produced by construction could disperse onto vegetation in proposed open space areas. Effects on vegetation due to airborne dust could occur adjacent to construction areas. A continual cover of dust may reduce the overall vigor of individual plants by reducing their photosynthetic capabilities and increasing their susceptibility to pests or disease; in turn, this could affect animals dependent on these plants. Dust control will comply with County grading regulations, including application of water on unpaved, unvegetated surfaces during construction. Therefore, fugitive dust impacts to sensitive vegetation on site would be less than significant.

Non-Native Plant Species

Impact 3.1.3-5: Non-native plants could colonize sites disturbed by construction and could potentially spread into adjacent native habitats, especially following a disturbance such as fire. Many of these non-native plants are highly invasive and can displace native vegetation which may reduce native species diversity, increase flammability and fire frequency, change groundwater and surface water levels, or adversely affect native wildlife that is dependent on the native plant species. Further colonization by non-native plant species in non-impact areas and the resulting degradation of the open space for use by native species would be considered a significant impact.

Edge Effects

A significant impact would occur if the value of habitat would be moderately to substantially degraded, either immediately or in the long-term, by a decline in value or function of the habitat. Edge effects occur when blocks of habitat are fragmented by development, making it easier for non-native plant species to invade native habitats and for native and non-native predators to access prey that may have otherwise have been protected within large, contiguous blocks of habitat. Secondary extinctions through disruption of predator-prey, parasite-host, and plant-pollinator relations may also occur. The project will not significantly increase the amount of developed land bordering native habitat. The existing coastal sage scrub is presently fragmented in these areas as a result of the development to the north and east of the project site. The project is adjacent to a large open space preserve to the south; however, only a small portion of this area supports coastal sage scrub adjacent to the project site. Because of the existing agriculture and residential uses currently occurring on the site (no contiguous blocks of habitat), the type of development proposed, and the setbacks required for the Limited Building Zones, impacts resulting from edge effects are considered less than significant.

Domesticated Pets

Impact 3.1.3-6: The project has the potential for nuisance species and domesticated animals to impact native wildlife. Domestic animals (e.g., cats and dogs) could significantly impact native wildlife in the immediate area. Cats, especially, are known to hunt rodents and birds. In addition, residential uses may introduce Argentine ants (*Linepithema humile*) to local habitats, which could have significant consequences for native ant species and animals that feed on them. The introduction of nuisance or domesticated animal species into open space would exceed the threshold for creating edge effects to native habitat or wildlife and would be considered a significant impact.

Human Activity

Impact 3.1.3-7: Increased human activity on the site will occur during the construction and grading phases of the project. Although potential impacts on biological resources have been identified for the project, additional impacts may potentially occur outside of the areas delineated for improvement. Potential impacts on sensitive biological resources as a result of unauthorized construction activities adjacent to the construction limits would exceed the threshold for creating edge effects to native habitat or wildlife and would be considered a significant impact.

Increased human activity will occur with long-term occupation of the property and degrade sensitive vegetation by further fragmenting habitat and forming edges, through the creation of roads and removal of existing vegetation. In addition, future illegal dumping of lawn and garden clippings, trash, and other refuse may occur, which would be considered a significant impact. These impacts would exceed the threshold for creating edge effects to native habitat or wildlife and would be considered significant as sensitive habitats would be degraded by increased human activity.

Animal Behavioral Changes

Breeding birds and mammals may temporarily or permanently leave their territories to avoid construction activity, which could lead to reduced reproductive success and increased mortality. Grading, clearing and construction activities may result in an impact on breeding birds and mammals. However, because the site is not part of a larger block of habitat considered locally or regionally essential (Significance Criteria 1), is not a part of a corridor or linkage (Significance Criteria 2), no federally or State-listed animal species were observed onsite (Significance Criteria 10), and has no impacts to the regional long-term survival of a local population of an animal species listed as federally or state endangered or threatened, or Species of Special Concern, MSCP Narrow Endemics, or listed as County Sensitive (Significance Criteria 10), indirect project impacts to animals in the form of behavior changes are expected to be less than significant.

Raptors were also observed on site and are susceptible to disturbance from construction activities. However, little suitable habitat (usually large trees) for raptor nesting occurs on site. Grading, clearing and construction activities could result in an indirect impact on breeding raptors by causing temporary displacement. However, because the site is not part of a larger block of habitat considered locally or regionally essential (Significance Criteria 1), is not part of a corridor or linkage (Significance Criteria 2), is not known to occur within 4,000 feet of an active golden eagle nest (Significance Criteria 12 and 13), and will not result in the removal of substantial raptor foraging habitat (Significance Criteria 15), indirect project impacts to raptors in the form of behavior change are expected to be less than significant.

Roadkill

Roadkill could occur as vehicles travel on the internal roads associated with the project. While roadkill impacts could increase, they are considered to be less than significant because no Federally or State-listed species were found onsite and because the project is adjacent to existing development.

Night Lighting

Night lighting on native habitats can provide nocturnal predators with an unnatural advantage over their prey. This could potentially increase the loss of native wildlife, especially for any sensitive species that could occur on the site. The private roads within the project site are exempt from street lighting requirements. As such, to be consistent with the rural setting of the project, street lighting along the private roads is not proposed. However public road SR-94, located along the frontage of the proposed project site, is required by the County of San Diego to include street lighting. Due to the potential for impacts resulting from street lights which may expose wildlife species to unnatural lighting that could alter their behavior

patterns and may diminish species diversity, the project applicant has applied for a street light waiver on public road SR 94, along the frontage of the proposed project site; however, one street light will be installed at the southeast corner of SR-94 and Melody Road for safety purposes. The project site is not adjacent to any open space. As the project does not propose street lighting adjacent to open space, and future homes will be located at least 100 feet from sensitive habitat due to fire clearing requirements, potential impacts to wildlife caused by lighting are considered less than significant.

In addition, the project is required to comply with the County of San Diego Light Pollution Code (San Diego County Code 59.101). The subject site is located within Zone B of the County, which permits outdoor lighting but requires the lighting fixtures to be fully shielded to prevent light spillover into the night sky or adjacent properties. Lighting fixtures are reviewed for compliance with the Light Pollution Code as part of plan review during the building permit process. As lighting impacts from residences will be consistent with the County Code, lighting impacts on adjacent habitat are considered less than significant.

Errant Construction

Impact 3.1.3-8: Any grading, habitat clearing, or other impacts that inadvertently occur outside the limits of construction in sensitive habitat would be significant. Limited building zones required by the Wildfire Safety/Vegetation Management Master Plan for the project (refer to Appendix M) will be provided adjacent to biological open space and would protect on- and offsite open space from indirect impacts. However, without identifying the limits of construction, there may be potential significant errant construction impacts outside the construction limits onsite.

Groundwater Drawdown

Impact 3.1.3-9: The distances to proposed project wells from the closest groundwater-dependent plant species (sycamore) is approximately 215 feet. The effects of the proposed project on groundwater supplies were analyzed using two different pumping scenarios that varied in pumping rate and pumping duration (Wieldin and Associates, July 2006). At a distance of 200 feet, a distance slightly less than the distance between well PV-4 and the nearest groundwater-dependent habitat, estimated drawdown from the pumping well ranged from a maximum of 3.3 feet to a minimum of 0.9 foot. In seven of eight drawdown calculations, estimated drawdown would be less than the biological groundwater threshold of three feet at the closest groundwater dependent habitat. However, under a worst-case scenario, it was determined that estimated drawdown could exceed the three-foot below historic low groundwater table elevation significance criterion; Therefore, potential project impacts due to groundwater drawdown are considered significant.

3.1.4 Cumulative Impact Analysis

For the cumulative analysis of impacts related to biological resources, a study area was selected that includes past, present, and future projects that have the potential to contribute to cumulative impacts on biological resources in the project area. The study area is generally bounded by Olive Vista Road to the north, the eastern boundary of Rancho Jamul Estates to the east, the southern boundary of Daley Ranch open space to the south, and Pioneer Way to the west. The study area boundary was selected to include the areas of undeveloped land with

potential for connectivity to the project. Refer to Table 3.1-6 for a list of projects that were considered in the analysis. Figure 3.1-6 shows the location of the projects.

As shown in Figure 3.1-6, the majority of the projects identified in the cumulative study area do not have any off-site connectivity to the proposed project site. The majority of these projects are separated from the project by distance (0.25 to 1 mile), topography, and by major roads. The project does not represent a significant linkage to existing habitat corridors offsite. As such, the projects in the cumulative study area when combined do not result in a substantial loss of habitat connectivity or linkages. Therefore, potential impacts to large blocks of habitat are considered to be less than cumulatively considerable.

All of the cumulative study area projects are located outside of the larger regional corridor located a few miles to the south of the proposed project that follows Dulzura Creek through Hollenbeck Canyon. As such, individual impacts from projects, both approved and pending, do not result in cumulatively considerable impacts that would restrict wildlife movement between large preserve areas. Therefore, potential cumulative impacts to wildlife corridors and habitat linkages are less than cumulatively considerable.

Table 3.1-6 provides an account of the proposed biological impacts of the projects within the Peaceful Valley Ranch cumulative impact study area. Impacts to coastal sage scrub resulting from these projects are as follows: Simpson Farms, 90 acres; Jamul Indian Village Casino Development project, 35.9 acres; and Peaceful Valley Ranch 25 acres. These projects represent the majority of the 152.6 acres of impacted coastal sage scrub within the study area. The Simpson Farms and Jamul Indian Casino Development projects represent 82% of the total amount of impacted coastal sage scrub habitat. No California gnatcatchers have been identified on the Peaceful Valley Ranch or Jamul Indian Village Casino Development properties. Studies are still being completed for the Simpson Farms project. As such, the potential loss of coastal sage scrub on project sites in the cumulative impact area does not represent a significant loss of habitat for known California gnatcatcher territories. Table 3.1-6 shows that there is no significant loss of other sensitive habitat types. The proposed project has minimized impacts to sensitive wetland and oak woodland habitats through avoidance and onsite preservation.

None of the projects in the cumulative study area have been identified as having impacts to the regional long-term survival of sensitive plant or animal species. As previously stated, the connectivity with offsite areas permits movement and genetic exchange of animal and plant species. None of the other individual projects have identified impacts to sensitive species that would affect their long-term survival within the region. Furthermore, none of the individual projects in the cumulative project study area have been identified as having impacts to State or Federally Threatened, Endangered, Species of Special Concern, County of San Diego Group I animal species, or County of San Diego Group A or B plant species that would reduce the local population of those species by more than 20% or causing impacts that would be considered detrimental to the regional long term survival of a species. Therefore, potential cumulative impacts to sensitive plant and animal species are considered less than cumulatively considerable.

All of the projects in the cumulative study area are required to conform to the County's BMO, which is one of the mechanisms by which the MSCP goals of establishing a habitat based preserve system to connect large blocks of viable habitat are implemented. Projects

within the MSCP area are required to mitigate for impacts to biological resources. The MSCP provides for the long-term preservation of sensitive habitats and species and mitigates for the incremental loss of such resources on a region-wide level. Impacts are reduced through the MSCP program because mitigation sites are required in areas where they will contribute to the establishment of an overall preserve system. The preserve system has been planned to establish significant blocks of habitat to reduce edge effects, provide for the preservation of key populations of regional plant and animal species, and to maximize habitat diversity. Compliance with the County's BMO (and subsequently MSCP) and offsite mitigation program would reduce cumulatively significant impacts on biological resources to less than cumulatively considerable.

3.1.5 Growth-Inducing Impacts

As discussed in Section 1.7, the proposed project would not result in growth-inducing impacts. The Peaceful Valley Ranch development would not remove obstacles to population growth or encourage or facilitate other activities that could significantly affect the environment, either individually or cumulatively. Therefore, no growth-inducing impacts relating to biological resources would occur as a result of the proposed project.

3.1.6 Mitigation Measures

The following mitigation measures are proposed to mitigate the project's impacts associated with biological resources.

Sensitive Vegetation Communities

A Biological Open Space Easement would be placed on all areas outside the grading and brush management areas; however, this open space would not count toward project mitigation and would be considered impact neutral. All project mitigation would occur offsite. Mitigation measures and ratios used below are based on the County BMO and MSCP Subarea Plan. The proposed mitigation measures are based on the impacts of the project, as detailed in Table 3.1-5.

3.1.3-1: Impacts to Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, southern mixed chaparral, non-native grassland, and 0.04 acre of oak root zone buffer shall be mitigated through offsite mitigation as follows.

A minimum of 38.1 acres of upland habitats that includes 0.04 acre of coast live oak woodland shall be acquired at a County-approved mitigation bank within the MSCP. Alternatively, the required habitat types and acreage could be preserved and managed in permanent biological open space in a County-approved location in accordance with a County-approved Habitat Management Plan. Any offsite habitat mitigation must be within the MSCP in an area designated as a Pre-approved Mitigation Area (PAMA) or meeting the definition of a Biological Resource Core Area (BRCA).

Sensitive Plant Species

No significant impacts were identified. Therefore, no mitigation is required. Although impacts to sensitive plant species are considered less than significant, in accordance with the

Biological Mitigation Ordinance (BMO), impacts to Group D plant species shall be protected through the habitat-based mitigation as detailed in mitigation measure 3.1.3-1.

Sensitive Animal Species

- 3.1.3-2:** In order to ensure compliance with the MBTA, clearing of native vegetation shall occur outside of the breeding season of most avian species (February 15 through September 15). Clearing during the breeding season of MBTA-covered species could occur if it is determined that no nesting birds (or birds displaying breeding or nesting behavior) are present immediately prior to clearing and would require approval of the Director of Planning and Land Use through written concurrence from the USFWS and CDFG that no breeding or nesting avian species are present in the vicinity of the grubbing, grading, and construction.

Jurisdictional Areas

- 3.1.3-3:** Impacts to 0.32 acre of Corps and CDFG jurisdiction shall be mitigated by the purchase of credits worth 0.32 acre at the Rancho Jamul Mitigation Bank or other bank approved by the Director of Planning and Land Use.

Wildlife Corridors

No significant impacts were identified. Therefore, no mitigation is required.

Surface Water Quality

No significant impacts were identified. Therefore, no mitigation is required.

Construction Noise

- 3.1.3-4:** Impacts relating to construction noise shall be mitigated by causing to be placed on grading and/or improvement plans and on the Final Map, the following: Restrict all brushing, clearing and/or grading such that none will be allowed within 300 feet of occupied tree-nesting raptor habitat or 800 feet within ground-nesting raptor habitat during the breeding season. This is defined as occurring between February 15 through July 15. The Director of Planning and Land Use may waive this condition, through written concurrence from the U.S. Fish and Wildlife Service and the California Department of Fish and Game, that no raptors are present in the vicinity of the brushing, clearing or grading.

Fugitive Dust

No significant impacts were identified. Therefore, no mitigation is required. Refer to Design Measures in Chapter 8.0.

Non-Native Plant Species

- 3.1.3-5:** Areas that are impacted but undeveloped (e.g., cut or fill slopes) shall be revegetated with native species or noninvasive, non-native species immediately after ground disturbance is completed.

Edge Effects

No significant impacts were identified. Therefore, no mitigation is required.

Domesticated Pets

- 3.1.3-6:** Potential impacts of pets and nuisance animal species on wildlife shall be mitigated through informational signage and permanent fencing.

Human Activity

- 3.1.3-7:** Permanent fencing and signage shall be provided identifying the limits of all onsite biological open space, consistent with Figure 3.1-7 of the EIR, and more particularly described on TM 5341 RPL5. In addition, permanent fencing will be provided along sides of all trails adjacent to biological open space. In addition, preserved habitat shall be posted with signs precluding access due to habitat sensitivity and prohibiting dumping.

Animal Behavioral Changes

No significant impacts were identified. Therefore, no mitigation is required.

Roadkill

No significant impacts were identified. Therefore, no mitigation is required.

Night Lighting

No street lighting is being proposed on either public or private roads, with the exception of one street light at the intersection of SR-94 and Melody Road. The proposed project applicant is applying for a waiver for the required street lighting on public road SR-94. Since no street lighting is proposed, no significant lighting impacts were identified. Therefore, no mitigation is required. Refer to Design Measures in Chapter 8.0.

Errant Construction

- 3.1.3-8:** Temporary fencing shall be required where proposed grubbing, clearing, or grading is within 100 feet of biological open space. All construction limits shall be clearly delineated with temporary fencing, such as silt fencing or fiber rolls and orange construction fencing to ensure that construction activity remains within the defined limits evaluated in the Biological Technical Report. A qualified biologist shall inspect the fencing and shall monitor construction activities occurring adjacent to the construction limits to avoid unauthorized impacts. The project proponent shall provide evidence to the Department of Planning and Land Use in the form of a letter that the biologist has been contracted, has completed the monitoring, and that requirements have been met successfully.

Groundwater Drawdown

- 3.1.3-9:** The project will implement monitoring and mitigation requirements consistent with the Groundwater Resource Evaluation report (Wiedlin & Associates, 2006).

3.1.7 Conclusions

Sensitive Vegetation Communities

Implementation of Mitigation Measure 3.1.3-1, based on replacement ratios identified in the County BMO and MSCP Subarea Plan, would reduce potential impacts on sensitive onsite vegetation communities, as identified in Impact 3.1.3-1. A biological open space easement would be required for the long-term protection of selected onsite coastal sage scrub and wetlands and wetland buffers. Purchase of offsite habitat mitigation would occur prior to approval of grading or improvement plans, and prior to approval of the Final Map. Additionally, a 100-foot to 150-foot limited building zone easement will be granted to the County of San Diego located adjacent to the biological open space easement to prevent fire-clearing impacts on onsite and offsite biological open space easements and habitat preserves. Proposed mitigation would ensure that direct impacts on sensitive vegetation communities are reduced to less than significant.

Sensitive Animal Species

Implementation of Mitigation Measure 3.1.3-2 would reduce potential direct impacts associated with Impact 3.1.3-2, which are impacts to avian species that may breed onsite. Mitigation Measure 3.1.3-2 requires, if nesting birds or birds displaying breeding or nesting behavior are identified onsite, the clearing of native vegetation to occur outside breeding season of MBTA-covered species (February 15 through September 15). Proposed mitigation would ensure that direct impacts on avian species are reduced to less than significant.

Jurisdictional Wetlands

Implementation of Mitigation Measure 3.1.3-3 would reduce potential direct impacts associated with Impact 3.1.3-3. This mitigation measure is intended to reduce significant impacts on 0.32 acre of non-wetland Waters of the U.S. under the jurisdiction of the ACOE and impacts to 0.32 acre of CDFG jurisdiction that includes the 0.32-acre of ACOE jurisdiction. Mitigation would occur through the purchase of credits offsite at an approved mitigation bank to reduce impacts on non-wetland waters to less than significant.

Construction Noise

Implementation of Mitigation Measure 3.1.3-4 would reduce potential direct impacts associated with Impact 3.1.3-4, which is the impact to nesting raptors from construction noise caused by grading, brushing, and/or clearing activities. This mitigation measure would require the applicant to refrain from construction within 300 feet of occupied tree-nesting raptor habitat or within 800 feet of ground-nesting raptor habitat. If breeding/nesting of raptors is observed, construction shall be postponed until the breeding season (February 15 through July 15) has ceased. Implementation of this proposed mitigation would ensure that potentially significant indirect impacts to nesting raptors from construction noise would be reduced to less than significant.

Non-Native Plant Species

Implementation of Mitigation Measure 3.1.3-5 would reduce indirect impacts associated with Impact 3.1.3-5, which is the potential for invasive plant species to take root onsite in areas

disturbed by grading or construction activities. The applicant will be required to revegetate onsite areas that are impacted and undeveloped (e.g., cut or fill slopes) with native species or non-invasive, non-native species immediately after ground disturbance is completed. Proposed mitigation will ensure that indirect impacts on biological resources from invasive, non-native plant species are reduced to less than significant levels.

Domesticated Pets

Implementation of Mitigation Measure 3.1.3-6 would reduce impacts associated with Impact 3.1.3-6, which is the potential for nuisance species or domesticated animals to impacts native wildlife. Mitigation Measure 3.1.3-6 would implement permanent fencing around all biological open space to restrict the movement into protected open space areas. Signage would be posted to inform pet owners of the restricted areas. This mitigation measure would reduce impacts from domesticated pets to less than significant.

Human Activity

Implementation of Mitigation Measure 3.1.3-7 would reduce impacts associated with Impact 3.1.3-7, which is the potential for human disturbance of sensitive biological resources in areas not identified for improvement. The proposed mitigation would require permanent fencing and signage onsite to identify the limits of the biological open space easements and to preclude access and prohibit dumping. Proposed mitigation would reduce potential indirect impacts caused by human activity to less than significant.

Errant Construction

Implementation of Mitigation Measure 3.1.3-8 would reduce impacts associated with Impact 3.1.3-8, which is the potential for offsite construction activities to impact sensitive habitat. Mitigation would require delineation of the onsite limits where proposed grubbing, clearing, or grading activities are to occur within 100 feet of biological open space to prevent activity in areas where improvements are not authorized and where potential impacts on biological resources have not been analyzed. Mitigation will require that areas proposed for improvement be temporarily fenced and that a qualified biologist inspect the fencing and monitor construction activities to minimize the potential for unauthorized biological impacts to occur. The proposed mitigation would ensure that impacts from errant construction would be reduced to less than significant.

Groundwater Drawdown

Implementation of Mitigation Measure 3.1.3.9 would reduce the potential impacts associated with Impact 3.1.3-9, which is the impact from groundwater drawdown to groundwater dependent habitat. Mitigation would require a groundwater level monitoring program to be established that will tie groundwater production to groundwater drawdown at a monitoring well to be installed in the vicinity of the nearest groundwater-dependent habitat. This mitigation measure would ensure groundwater drawdown not exceed the significance criteria of three feet below the historic low groundwater table elevation and thereby, would reduce impacts to less than significant.

**Table 3.1-1
Onsite Vegetation Communities**

Vegetation Community*	Acreage**
Tier I:	
Coast live oak woodland (71160)	0.9
Riparian woodland (62000)	0.4
Mule fat scrub (63310)	0.03
Tier II:	
Diegan coastal sage scrub (32500)	27.4
Diegan coastal sage scrub – disturbed	2.2
Tier III:	
Southern mixed chaparral (37120)	3.1
Non-native grassland (42200)	25.0
Other:	
Non-native vegetation	0.9
Eucalyptus woodland (11100)	0.4
Disturbed habitat (11300)	9.5
Agriculture (18000)	106.0
Developed (12000)	5.5
Total:	181.31

*Categories and codes are from Holland (1986) and Oberbauer (1996).

** Total acreage equals 181.33 if column is added due to rounding.

**Table 3.1-2
Listed or County-Sensitive Plant Species
with Potential To Occur Onsite**

Species	Status*	Potential To Occur
California Orcutt grass (<i>Orcuttia californica</i>)	FE/SE CNPS List 1B R-E-D 3-3-2 County Group A	Low. Vernal pools are not present onsite. Would have been observed if present.
Otay mesa mint (<i>Pogogyne nudiuscula</i>)	FE/SE CNPS List 1B R-E-D 2-3-3 County Group A	Low. Vernal pools are not present onsite. Would have been observed if present.
Willow monardella (<i>Monardella linoides</i> ssp. <i>viminea</i>)	FE/SE CNPS List 1B R-E-D 2-3-2 MSCP NE County Group A	Low. Occurs on rocky washes generally associated with coastal sage scrub or chaparral. Would have been observed if present.
San Diego button-celery (<i>Eryngium aristulatum</i> var. <i>parishii</i>)	FE/SE CNPS List 1B R-E-D 2-3-2 County Group A	Low. Vernal pools are not present onsite. Would have been observed if present.
San Diego ambrosia (<i>Ambrosia pumila</i>)	FE/-- CNPS List 1B R-E-D 3-3-2 County Group A	Low. Occurs in silty-bottomed drainages and valley bottoms. Would likely have been observed if present.
Thread-leaved brodiaea (<i>Brodiaea filifolia</i>)	FT/SE CNPS List 1B R-E-D 3-3-3 County Group A	Low. Occurs in coastal sage scrub, cismontane woodlands, grassland, and vernal pools with clay soils. Would likely have been observed if present.
Otay tarplant (<i>Deinandra conjugens</i>)	FT/SE CNPS List 1B R-E-D 2-3-2 MSCP NE County Group A	Low. Occurs on clay soils in grasslands and coastal sage scrub. Would have been observed if present.
San Diego thornmint (<i>Acanthomintha ilicifolia</i>)	FT/SE CNPS List 1B R-E-D 2-3-2 MSCP NE County Group A	Low. Occurs on clay lenses in open areas. Would likely have been observed if present.
Dehesa beargrass (<i>Nolina interrata</i>)	--/SE CNPS List 1B R-E-D 3-3-2 MSCP NE County Group A	Very low. Associated with gabbro or peridotite soils, which are not present on site. Known only from a few locations in southern San Diego County.
Spreading navarretia (<i>Navarretia fossalis</i>)	FT/-- CNPS List 1B R-E-D 2-3-2 County Group A	Low. Vernal pools are not present onsite. Would have been observed if present.
Mexican flannelbush (<i>Fremontodendron mexicanum</i>)	/SR CNPS List 1B R-E-D 3-3-2 County Group A	Low. Occurs in moist, shaded canyons. The canyons onsite do not appear suitable for this species, including the canyon in the eastern portion of the site. Would have been observed if present.

Table 3.1-2 continued

Species	Status*	Potential To Occur
Dean's milk-vetch (<i>Astragalus deanei</i>)	--/-- CNPS List 1B R-E-D 3-3-3 County Group A	Low. Occurs on hillsides in open coastal sage scrub, chaparral, or southern oak woodland, all of which are limited on site. Would have been observed if present.
Otay Mountain lotus (<i>Lotus crassifolius</i> ssp. <i>otayensis</i>)	/-- CNPS List 1B R-E-D 3-3-2 County Group A	Low. Probably requires more moisture than is present onsite. Would have been observed if present.
Snake cholla (<i>Opuntia parryi</i> var. <i>serpentina</i>)	/-- CNPS List 1B R-E-D 3-3-2 MSCP NE County Group A	Low. Occurs in sage scrub. Would have been observed if present.
Parry's tetracoccus (<i>Tetracoccus dioicus</i>)	/-- CNPS List 1B R-E-D 3-3-2 County Group A	Low. Occurs on gabbro soils not found onsite. Would have been observed if present.
Otay manzanita (<i>Arctostaphylos otayensis</i>)	/-- CNPS List 1B R-E-D 3-2-3 County Group A	Low. Occurs in chaparral. Would have been observed if present.
Lakeside ceanothus (<i>Ceanothus cyaneus</i>)	--/-- CNPS List 1B R-E-D 3-2-2 MSCP NE County Group A	Low. Found in chaparral, which is limited on site. Would have likely been observed if present.
Tecate cypress (<i>Cupressus forbesii</i>)	/-- CNPS List 1B R-E-D 3-2-2 County Group A	Low. Occurs in closed coniferous forest and chaparral. Would have been observed if present.
Gander's pitcher sage (<i>Lepechinia ganderi</i>)	/-- CNPS List 1B R-E-D 3-1-2 County Group A	Low. Occurs in chaparral, coastal sage scrub and grassland. Would have been observed if present.
Nuttall's scrub oak (<i>Quercus dumosa</i>)	/-- CNPS List 1B R-E-D 2-3-2 County Group A	Low. Occurs in chaparral or coastal scrub with sandy or clay loam soils. Would have been observed if present.
Summer holly (<i>Comarostaphylos diversifolia</i>)	/-- CNPS List 1B R-E-D 2-2-2 County Group A	Low. Occurs in chaparral. Would have been observed if present.
Dunn's mariposa lily (<i>Calochortus dunnii</i>)	/-- CNPS List 1B R-E-D 2-2-2 County Group A	Low. Typically occurs in closed coniferous forests and chaparral with gabbroic soils (not found onsite). Would have been observed if present.
Variegated dudleya (<i>Dudleya variegata</i>)	/-- CNPS List 1B R-E-D 2-2-2 MSCP NE County Group A	Low. Occurs on dry hillside and mesas in chaparral, coastal sage scrub, grasslands, and near vernal pools. Would likely have been observed if present.

Table 3.1-2 continued

Species	Status*	Potential To Occur
San Diego goldenstar (<i>Muilla clevelandii</i>)	/-- CNPS List 1B R-E-D 2-2-2 MSCP NE County Group A	Low. Occurs in clay soils on dry mesas and hillsides in coastal sage scrub or chaparral. Would likely have been observed if present.
Decumbent goldenbush (<i>Isocoma menziesii</i> var. <i>decumbens</i>)	--/-- CNPS List 1B R-E-D 2-2-2 County Group A	Low. Occurs in coastal sage scrub onsite. An infrequent plant of sandy areas (Beauchamp 1986). Would have been observed if present.
Felt-leaved rock mint (<i>Monardella hypoleuca</i> ssp. <i>lanata</i>)	--/-- CNPS List 1B R-E-D 2-2-2 County Group A	Low. Generally occurs on rocky ridges and near peak tops. Would have been observed if present.
Orcutt's bird-beak (<i>Cordylanthus orcuttianus</i>)	/-- CNPS List 2 R-E-D 3-3-1 County Group B	Low. Would have likely been observed if present.
Palmer's goldenbush (<i>Ericameria palmeri</i> ssp. <i>palmeri</i>)	--/-- CNPS List 2 R-E-D 3-2-1 MSCP NE County Group B	Low. Occurs in coastal sage scrub. Would have likely been observed if present.
San Diego marsh-elder (<i>Iva hayesiana</i>)	/-- CNPS List 2 R-E-D 2-2-1 County Group B	Low. Occurs in low-lying, moist, or alkaline places along the coast. Has been reported along intermittent streams. Would have been observed if present.
San Diego barrel cactus (<i>Ferocactus viridescens</i>)	/-- CNPS List 2 R-E-D 1-3-1 County Group B	Low to moderate. Occurs on dry slopes in coastal sage scrub. Would have been observed if present.
Palmer's grapplinghook (<i>Harpagonella palmeri</i>)	/-- CNPS List 2 R-E-D 1-2-1 County Group B	Low to moderate. Occurs on clay soils in grasslands and coastal sage scrub. Would likely have been observed if present.
Little mouseltail (<i>Myosurus minimus</i> ssp. <i>apus</i>)	/-- CNPS List 3 R-E-D 2-3-2 County Group A	Low. Occurs in vernal pools and alkaline marshes. Would likely have been observed if present.
Graceful tarplant (<i>Holocarpha virgata</i> ssp. <i>elongata</i>)	/-- CNPS List 4 R-E-D 1-2-3 County Group D	Low. Occurs in coastal sage scrub, cismontane woodland, and valley and foothill grassland. Would have been observed if present.
Cedros Island oak (<i>Quercus cedrosensis</i>)	--/-- CNPS List 2 R-E-D 3-2-1	Low. Occurs on the south slope of Otay Mountain and east of Marron Valley. Would have been observed if present.
Cedros Island oak (<i>Quercus cedrosensis</i>)	--/-- CNPS List 2 R-E-D 3-2-1	Low. Occurs on the south slope of Otay Mountain and east of Marron Valley. Would have been observed if present.

Table 3.1-2 continued

Species	Status*	Potential To Occur
Munz's sage (<i>Salvia munzii</i>)	--/-- CNPS List 2 R-E-D 2-2-1 County Group B	Low. Occurs in coastal sage scrub in the southern foothill and coastal region of San Diego County below approximately 1,640 feet in elevation. Would have been observed if present.
California adolphia (<i>Adolphia californica</i>)	--/-- CNPS List 2 R-E-D 1-2-1 County Group B	Low. Occurs on clay soils in chaparral and coastal sage scrub. Would have been observed if present.
Southwestern spiny rush (<i>Juncus acutus</i> ssp. <i>leopoldii</i>)	--/-- CNPS List 4 R-E-D 1-2-2 County Group D	Low. Occurs in drainages and wetland areas with moist, saline, or alkaline soils. Would have been observed if present.
San Miguel savory (<i>Satureja chandleri</i>)	--/-- CNPS List 4 R-E-D 1-2-2 County Group D	Low. Occurs in chaparral. Would have been observed if present.
California adder's tongue (<i>Ophioglossum californicum</i>)	--/-- CNPS List 4 R-E-D 1-2-2 County Group D	Low. Occurs around vernal moist areas, which are not present onsite. Would likely have been observed if present.
San Diego County needlegrass (<i>Achnatherum diegoense</i>)	--/-- CNPS List 4 R-E-D 1-2-1 County Group D	Low. Occurs in mesic areas in chaparral and coastal sage scrub. Would have been observed if present.
Southern mountain misery (<i>Chamaebatia australis</i>)	--/-- CNPS List 4 R-E-D 1-2-1 County Group D	Low. Occurs in chaparral. Would have been observed if present.
Western dichondra (<i>Dichondra occidentalis</i>)	--/-- CNPS List 4 R-E-D 1-2-1 County Group D	Low. Occurs in dry, sandy banks in coastal sage scrub, chaparral, or southern oak woodland and often proliferates on recently burned slopes. Would likely have been observed if present.
Ashy spike-moss (<i>Selaginella cinerascens</i>)	--/-- CNPS List 4 R-E-D 1-2-1 County Group D	Moderate. Occurs on mesas in coastal sage scrub and chaparral. Would likely have been observed if present.
Fish's milkwort (<i>Polygala cornuta</i> var. <i>fishiae</i>)	--/-- CNPS List 4 R-E-D 1-1-2 County Group D	Moderate. A cryptic species that grows in the shadows of other plants. Would have been observed if present.

*A listing and explanation of status and sensitivity codes is provided in Appendix E of the Biological Technical Report.

**Table 3.1-3
Listed or County-Sensitive Animal Species
with Potential To Occur Onsite**

Species	Status*	Potential To Occur
Invertebrates		
San Diego fairy shrimp (<i>Branchinecta sandiegonensis</i>)	FE/-- MSCP Rare, NE	Low. Occurs in vernal pools, which are not present.
Riverside fairy shrimp (<i>Streptocephalus woottoni</i>)	FE/-- MSCP Rare, NE	Low. Occurs in vernal pools, which are not present.
Quino checkerspot butterfly (QCB) (<i>Euphydryas editha quino</i>)	FE/-- MSCP Rare, NE	Low. Protocol surveys for this species were conducted and the species was not observed. The principal larval host plant of this species in San Diego is dwarf plantain, which was observed onsite in small sparse patches. Potential QCB habitat in the region includes vegetation communities with relatively open areas that typically include patches of dwarf plantain, purple owl's clover, and nectaring plants, all of which were observed on site. These habitats include vernal pools, lake margins (Emmel and Emmel 1973), non-native grassland, perennial grassland, disturbed habitat, disturbed wetlands, and open areas within shrub communities.
Harbison's dun skipper (<i>Euphyes vestris harbisoni</i>)	--/-- MSCP Rare, NE	Low. The host plant for this species, San Diego sedge (<i>Carex spissa</i>), occurs in small drainages and seasonal seeps on slopes. However, San Diego sedge was not observed onsite.
Thorne's hairstreak butterfly (<i>Mitoura thornei</i>)	--/-- MSCP Rare, NE	Low. Known from vicinity of Otay Mountain on host plant Tecate cypress (<i>Cupressus forbesii</i>), which was not observed onsite.
Hermes copper butterfly (<i>Lycaena hermes</i>)	--/-- County Sensitive	Low to moderate. Would have likely been observed during QCB surveys if present. Host plant spiny redberry (<i>Rhamnus crocea</i>) occurs onsite.
Monarch butterfly (<i>Danaus plexippus</i>)	--/-- County Sensitive	Low to moderate. Would have likely been observed during QCB surveys if present. Host plant <i>Asclepias</i> sp. occurs onsite.
Vertebrates		
Reptiles and Amphibians		
Arroyo southwestern toad (<i>Bufo microscaphus californicus</i>)	FE/CSC MSCP Rare, NE	None. Appropriate habitat does not occur onsite.
California red-legged frog (<i>Rana aurora draytonii</i>)	FT/CSC MSCP Rare, NE	None. Occurs in open water and lowland grasslands. Generally found in ponds in humid forests, woodland, grasslands, and stream sides, especially where cattails (<i>Typha</i> spp.) or other plants provide good cover. Frequents marshes, streams, lakes, reservoirs, ponds, and other generally permanent water sources, which are not present onsite.
Orange-throated whiptail (<i>Cnemidophorus hyperythrus beldingi</i>)	--/CSC County Sensitive	High in shrub habitats onsite.

Table 3.1-3 continued

Species	Status*	Potential To Occur
Red diamond rattlesnake (<i>Crotalus exsul</i>)	--/CSC County Sensitive	Moderate. Favors rocky outcrops in coastal sage scrub, chaparral, creosote bush scrub, and areas dominated by cactus. Also encountered along rocky canyon bottoms and on the flats adjacent to rocky, desert foothills.
Coronado Island skink (<i>Eumeces skiltonianus interparietalis</i>)	--/CSC County Sensitive	Moderate to high. Occurs in grasslands, coastal sage scrub, and open chaparral where there is abundant leaf litter or low, herbaceous growth.
Silvery legless lizard (<i>Anniella pulchra pulchra</i>)	--/CSC	Low to moderate. Occurs in areas with loose soil, particularly in sand dunes and/or otherwise sandy soil. Generally found in leaf litter, under rocks, logs, or driftwood in oak woodland, chaparral, and desert scrub. Prefers soils with a high moisture content.
San Diego horned lizard (<i>Phrynosoma coronatum blainvillei</i>)	--/CSC County Sensitive	Moderate to high. Occurs in coastal sage scrub, chaparral, open oak woodlands, and open coniferous forests. Important habitat components include basking sites, adequate scrub cover, areas of loose soil, and an abundance of harvester ants (<i>Pogonomyrmex</i> sp.), a primary prey item.
Western spadefoot (<i>Scaphiopus hammondi</i>)	--/CSC County Sensitive	Low. Occurs near open water.
Two-striped garter snake (<i>Thamnophis hammondi</i>)	--/CSC County Sensitive	Moderate. Found primarily along permanent creeks and streams, but also around vernal pools and along intermittent streams. Occasionally found in chaparral or other habitats relatively far from permanent water.
Coastal whiptail (<i>Cnemidophorus tigris multiscutatus</i>)	--/-- County Sensitive	Moderate to high. Occurs in open coastal sage scrub, chaparral, and woodlands. Frequently found along the edges of dirt roads traversing its habitats. Important habitat components include open, sunny areas, shrub cover with accumulated leaf litter, and an abundance of invertebrate prey, particularly termites.
Coastal rosy boa (<i>Lichanura trivirgata roseofusca</i>)	--/-- County Sensitive	Moderate. Occurs near rocky areas in coastal sage scrub and chaparral.
Western patch-nosed snake (<i>Salvadora hexalepis virgulata</i>)	--/CSC County Sensitive	Moderate. Occurs in shrub habitats onsite.
Southwestern pond turtle (<i>Clemmys marmorata pallida</i>)	--/CSC	None. Occurs in open water, which is not present onsite.
San Diego banded gecko (<i>Coleonyx variegatus abbottii</i>)	--/-- County Sensitive	Low. Occurs in chaparral and coastal sage scrub in areas with rock outcrops onsite.
San Diego ringneck snake (<i>Diadophis punctatus similis</i>)	--/-- County Sensitive	Moderate. Occurs in canyon bottoms or grassland, chaparral, and coastal sage scrub.
Birds		
Least Bell's vireo (<i>Vireo bellii pusillus</i>)	FE/SE MSCP Rare, NE	Low. Occurs in riparian woodlands and forests with understories, which are limited onsite.
Southwestern willow flycatcher (<i>Empidonax traillii eximius</i>)	FE/-- MSCP Rare, NE	Low. Occurs in mature riparian woodlands and forests, which are limited onsite.
Coastal California gnatcatcher (<i>Poliophtila californica californica</i>)	FT/CSC	Low. Focused surveys did not locate this species onsite.

Table 3.1-3 continued

Species	Status*	Potential To Occur
Southern California rufous-crowned sparrow (<i>Aimophila ruficeps canescens</i>)	--/CSC County Sensitive	Moderate. Occurs in coastal sage scrub on rocky hillsides and in canyons and in open sage scrub/grassy areas of successional growth (e.g., after a fire). Not observed during gnatcatcher surveys.
Ferruginous hawk (<i>Buteo regalis</i>)	Wintering; --/CSC County Sensitive	Low to moderate to forage onsite in open grasslands and agricultural fields.
Burrowing owl (<i>Athene cunicularia</i>)	--/CSC MSCP Rare, NE	Low. Focused surveys for this species were conducted and the species was not observed.
Yellow warbler (<i>Dendroica petechia brewsteri</i>)	--/CSC County Sensitive	Moderate. Occurs in riparian areas, which are present but limited onsite.
Yellow-breasted chat (<i>Icteria virens</i>)	--/CSC County Sensitive	Moderate. Occurs in brushy tangles, briars, stream thickets, riparian scrub, and riparian woodland, which is present but limited onsite.
Golden eagle (<i>Aquila chrysaetos</i>)	Nesting and wintering; --/CSC MSCP Rare, NE	Low. Mostly occurs in mountainous regions, but may forage in grassy and open, shrubby habitats. Nests most often on cliffs, less often in trees and tends to require places of solitude. Usually found at a distance from human habitation.
Sharp-shinned hawk (<i>Accipiter striatus</i>)	Nesting; --/CSC County Sensitive	Low. Occurs in edges of deciduous or coniferous woodlands and thickets. Breeds in the northern portion of California, but is only an uncommon winter visitor to San Diego County. Sometimes a casual visitor to San Diego in the summer.
Merlin (<i>Falco columbarius</i>)	Wintering; --/CSC County Sensitive	Low. Occurs in open woods, coniferous forests, and taiga; frequently found in open country and foothills in winter.
Grasshopper sparrow (<i>Ammodramus savannarum</i>)	--/-- County Sensitive	Moderate. Occurs in grassland habitat that usually has a mix of coastal sage scrub species.
Turkey vulture (<i>Cathartes aura</i>)	--/-- County Sensitive	High. Likely to forage onsite, but nests on rocky outcrops, which are not present.
White-tailed kite (<i>Elanus leucurus</i>)	--/-- County Sensitive	Moderate. Nesting typically occurs in riparian or oak woodlands adjacent to grassland where small mammals are hunted.
Common barn owl (<i>Tyto alba</i>)	--/-- County Sensitive	High. Likely to forage onsite.
Mammals		
Dulzura pocket mouse (<i>Chaetodipus californicus femoralis</i>)	--/CSC County Sensitive	Moderate. Occurs in chaparral.
Spotted bat (<i>Euderma maculatum</i>)	--/CSC County Sensitive	Low to roost onsite (prefers cliffs).
Greater western mastiff bat (<i>Eumops perotis californicus</i>)	--/CSC County Sensitive	Low to roost onsite, but may forage for prey. Foraging is concentrated around bodies of water, but also includes coastal sage scrub, chaparral, and grassland habitats.
San Diego black-tailed jackrabbit (<i>Lepus californicus bennettii</i>)	--/CSC County Sensitive	Moderate to high. Occurs primarily in open habitats, including coastal sage scrub, chaparral, grassland, croplands, and open, disturbed areas if there is at least some scrub cover present.
Yuma myotis (<i>Myotis yumanensis</i>)	--/CSC County Sensitive	Low to roost onsite, but may forage for prey near water onsite. Roosts in buildings, mines, caves, and crevices, which are absent or limited onsite.

Table 3.1-3 continued

Species	Status*	Potential To Occur
San Diego desert woodrat (<i>Neotoma lepida intermedia</i>)	--/CSC County Sensitive	Moderate. Occurs in open chaparral and coastal sage scrub, often building large, stick nests in rock outcrops or around clumps of cactus or yucca.
Southern grasshopper mouse (<i>Onychomys torridus ramona</i>)	--/CSC County Sensitive	Moderate. Occurs in arid shrublands.
Townsend's western big-eared bat (<i>Plecotus townsendii</i>)	FSC/CSC County Sensitive	Low to roost onsite. Could forage in the area, especially in more mesic habitats.
American badger (<i>Taxidea taxus</i>)	--/CSC County Sensitive	Low to moderate. Occurs in level, open areas in grasslands, agricultural fields, and open shrub habitats. Digs large burrows in dry, friable soils.
Pallid bat (<i>Antrozous pallidus</i>)	--/CSC County Sensitive	Low to roost onsite. Roosts in caves, mines, crevices, and abandoned buildings, but could forage onsite.
Small-footed myotis (<i>Myotis ciliolabrum</i>)	--/CSC County Sensitive	Low to roost onsite. Roosts in caves, mines, crevices, abandoned buildings, and occasionally under bridges and bark. Prefers humid roost sites, but could forage on-site, especially over water.
Long-eared myotis (<i>Myotis evotis</i>)	--/CSC County Sensitive	Low to moderate to roost onsite. Roosts in rock crevices, buildings, under bark, and in snags, but could forage onsite, especially over water and shrubs.
Fringed myotis (<i>Myotis thysanodes</i>)	--/CSC County Sensitive	Low to moderate to roost onsite. Roosts in rock crevices, buildings, mines, and caves, but could forage on-site, especially over water and open habitats.
Long-legged myotis (<i>Myotis volans</i>)	--/CSC County Sensitive	Low to moderate to roost onsite. Roosts in rock crevices, buildings, under tree bark, in snags, mines, and caves but could forage onsite, especially over water.
Long-legged myotis (<i>Myotis volans</i>)	--/CSC	Low to moderate to roost on site. Roosts in rock crevices, buildings, under tree bark, in snags, mines, and caves. Could forage on site, however, especially over water.
Big free-tailed bat (<i>Nyctinomops macrotis</i>)	--/CSC County Sensitive	Low. A rare species in California (CDFG 1990). Prefers rugged, rocky canyons. Roosts in crevices in high cliffs or rock outcrops. Often forages over water sources.
Ringtail (<i>Bassariscus astutus</i>)	--/-- County Sensitive	Low. Found in various riparian habitats and in brush stands of moist forest and shrub habitats at low to middle elevations.
Mountain lion (<i>Felis concolor</i>)	--/-- County Sensitive	onsiteLow. Main prey is mule deer, which onsite was not detected.
Southern mule deer (<i>Odocoileus hemionus</i>)	--/--	Low to moderate. Occurs in coastal sage scrub, riparian and montane forests, chaparral, grasslands, croplands, and open areas if there is at least some scrub cover present. Would have likely been detected if present.

*A listing and explanation of status and sensitivity codes is provided in Appendix C.

**Table 3.1-4
Direct Impacts to Sensitive Vegetation Communities**

Vegetation Community	Acreage	
	Existing	Impacted
Riparian woodland	0.4	0.0
Coast live oak woodland	0.9	0.0
Oak root zone buffer	N/A	0.04
Diegan coastal sage scrub	27.4	22.8
Diegan coastal sage scrub – disturbed	2.2	2.2
Southern mixed chaparral	3.1	3.1
Non-native grassland on site	25.0	22.2
Non-native grassland off site	0.6	0.6
TOTAL	59.6	50.9

**Table 3.1-5
Mitigation for Direct Impacts to
Sensitive Vegetation Communities**

VEGETATION COMMUNITY	ACRES			MITIGATION	
	Onsite	Biological Open Space (Impact Neutral)	Impacted	Ratio	Acres Required
Coast live oak woodland	0.9	0.9	0.0	1:1	0.0
Oak root zone buffer (mitigated with coast live oak woodland)	N/A	N/A	0.04	1:1	0.04
Diegan coastal sage scrub	27.4	4.5	22.8	1:1	22.8
Diegan coastal sage scrub – disturbed	2.2	0.0	2.2	1:1	2.2
Southern mixed chaparral	3.1	0.0	3.1	0.5:1	1.6
Non-native grassland (on site)	25.0	2.9	22.2	0.5:1	11.1
Non-native grassland (off site)	N/A	N/A	0.6	0.5:1	0.3
TOTAL	59.2	8.3	50.9	--	38.1

Table 3.1-6
Cumulative Impacts To Vegetation Communities/Habitats (In Acres)

Map ID	Project Name	Coast Live Oak Woodland		Diegan Coastal Sage Scrub (incl. disturbed)		Southern Mixed Chaparral		Non-native grasslands (incl. onsite and offsite)		Total	
		Total	Impacted	Total	Impacted	Total	Impacted	Total	Impacted	Total	Impacted
	Peaceful Valley Ranch	0.90	0.00	29.60	25.00	3.10	3.10	25.60	22.90	59.20	51.00
1	Yacco Minor Subdivision	--	--	1.19*	1.19	--	--	--	--	1.19*	1.19
2	Jamul Indian Casino Development Project	--	--	2.84	35.90	--	--	--	--	2.84	35.90
3	Blanco Parcel Map	--	--	0.00	--	--	--	--	--	0.00	--
4	Morgan Minor Subdivision	--	--	0.20*	0.20	0.10*	0.10	0.30	--	0.60*	0.30
5	Steinbarth Minor Subdivision	--	--	0.86*	0.86	--	--	1.42*	1.42	2.28*	2.28
6	AT&T Wireless Facility	--	--	1.90	--	--	--	--	--	1.90	--
7	Hendrix Subdivision	--	--	8.82	--	--	--	--	--	8.82	--
8	Jamul Highlands	2.67	--	0.31*	0.31	--	--	--	--	2.98*	0.31
9	Pioneer Minor Subdivision	--	--	--	--	--	--	0.60	--	0.60	--
10	Jamul Rural Estate Area	--	--	100**	--	--	--	--	--	100**	--
11	Jamul Estates II	2.92	--	45.01	--	--...	--	--	--	47.93	--
12	Simpson Farms	--	--	100.29	90.0	--	--	10.7	--	110.99	90.00
	Total	6.49	0.00	291.02	153.46	3.20	3.20	38.62	24.32	339.33	180.98

* Assumed a minimum acreage of existing habitat.

** Estimate – no application on file.

LEGEND

Vegetation

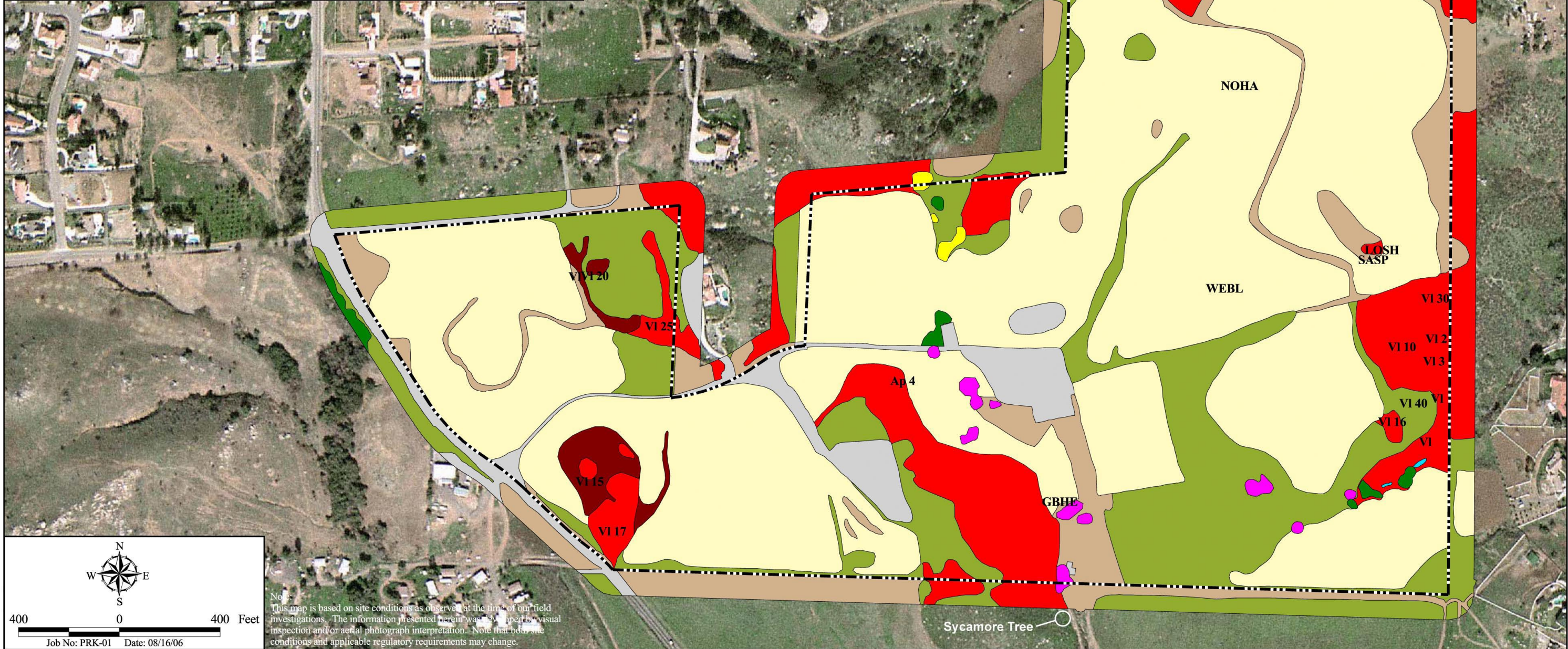
- Mule Fat Scrub (63310)
- Coast Live Oak Woodland (71160)
- Riparian Woodland (62000)
- Diegan Coastal Sage Scrub (32500)
- Diegan Coastal Sage Scrub Disturbed (32500)
- Southern Mixed Chaparral (37120)
- Non-native Grassland (42200)
- Non-native Vegetation (11000)
- Eucalyptus Woodland (11100)
- Agriculture (18000)
- Disturbed Habitat (11300)
- Developed (12000)

Note: Numbers in parentheses represent the Holland code for the vegetation type.

Sensitive Resources

- COHA Cooper's Hawk (*Accipiter cooperii*)
- SASP Sage Sparrow (*Amphispiza belli belli*)
- LOSH Loggerhead Shrike (*Lanius ludovicianus*)
- NOHA Northern Harrier (*Circus cyaneus*)
- HOLA California Horned Lark* (*Eremophila alpestris actia*)
- GBHE Great Blue Heron (*Ardea herodias*)
- RSHA Red-shouldered hawk (*Buteo lineatus*)
- WEBL Western Bluebird (*Sialia mexicana*)
- VI San Diego County Viguiera (*Viguiera laciniata*)
- Ap San Diego Sagewort (*Artemisia palmeri*)

* This species occurs throughout the Agriculture vegetation type.



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LEGEND

Vegetation

- Mule Fat Scrub (63310)
- Coast Live Oak Woodland (71160)
- Riparian Woodland (62000)
- Diegan Coastal Sage Scrub (32500)
- Diegan Coastal Sage Scrub Disturbed (32500)
- Southern Mixed Chaparral (37120)
- Non-native Grassland (42200)
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- Eucalyptus Woodland (11100)
- Agriculture (18000)
- Disturbed Habitat (11300)
- Developed (12000)

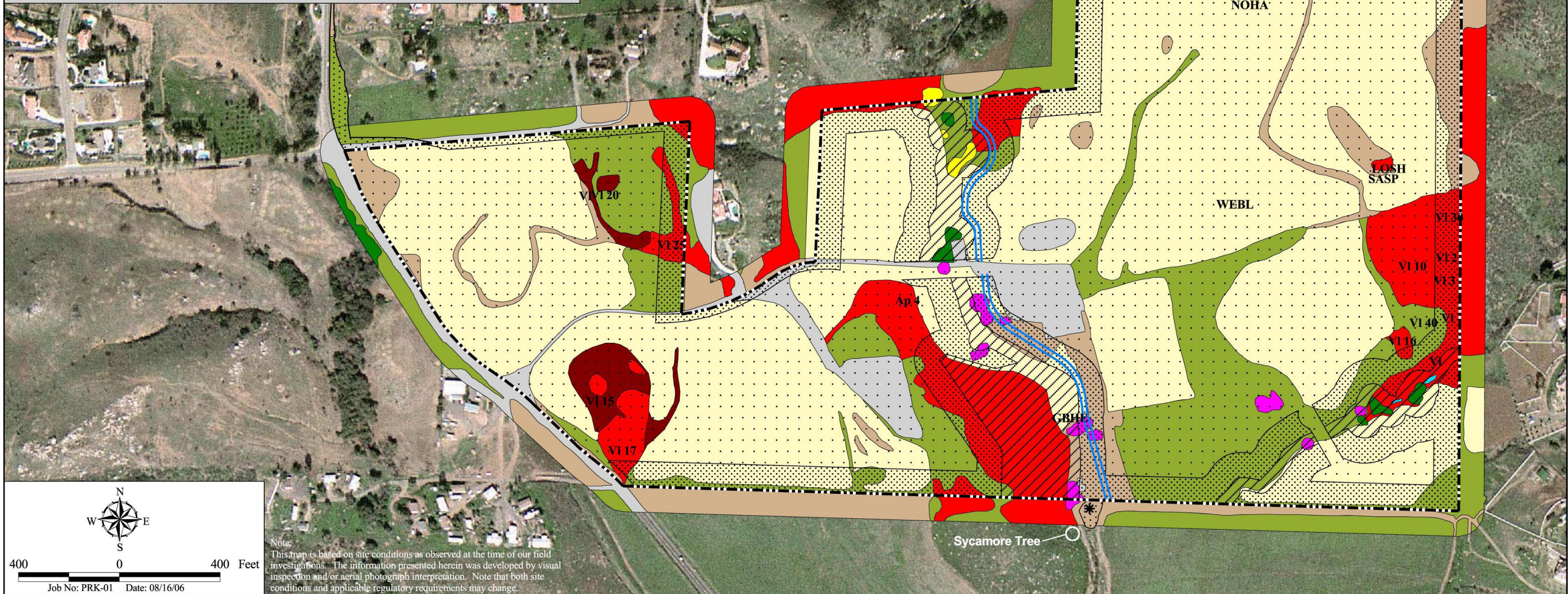
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Sensitive Resources

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- Ap San Diego Sagewort (*Artemisia palmeri*)

* This species occurs throughout the Agriculture vegetation type.

- Project Impacts
- Limited Building Zone
- Biological Open Space
- Trails
- Groundwater Monitoring Location
- Sycamore Tree



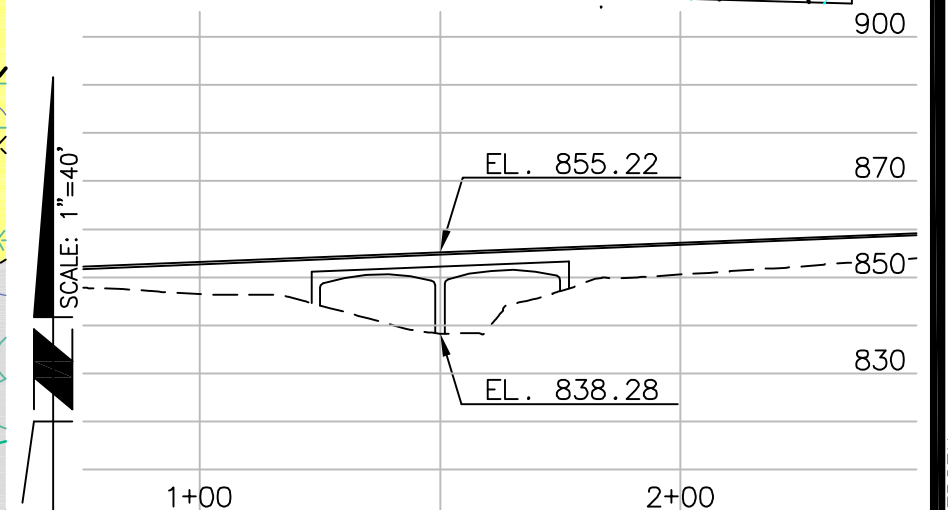
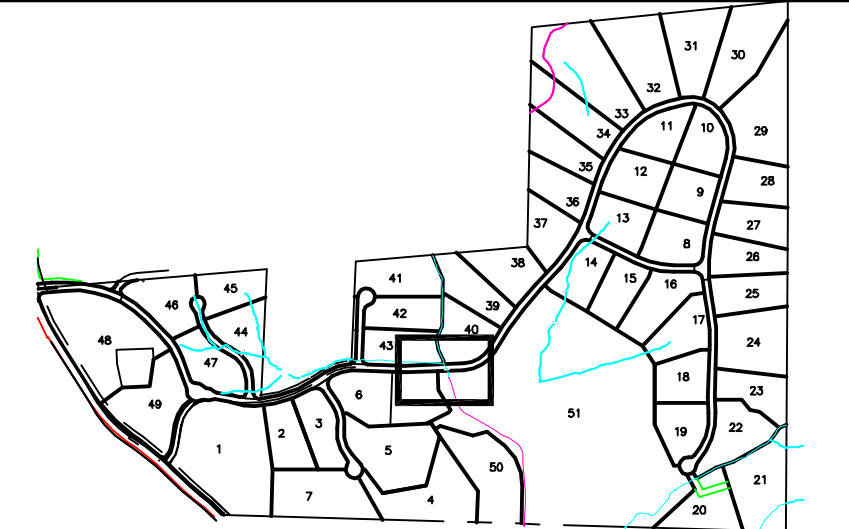
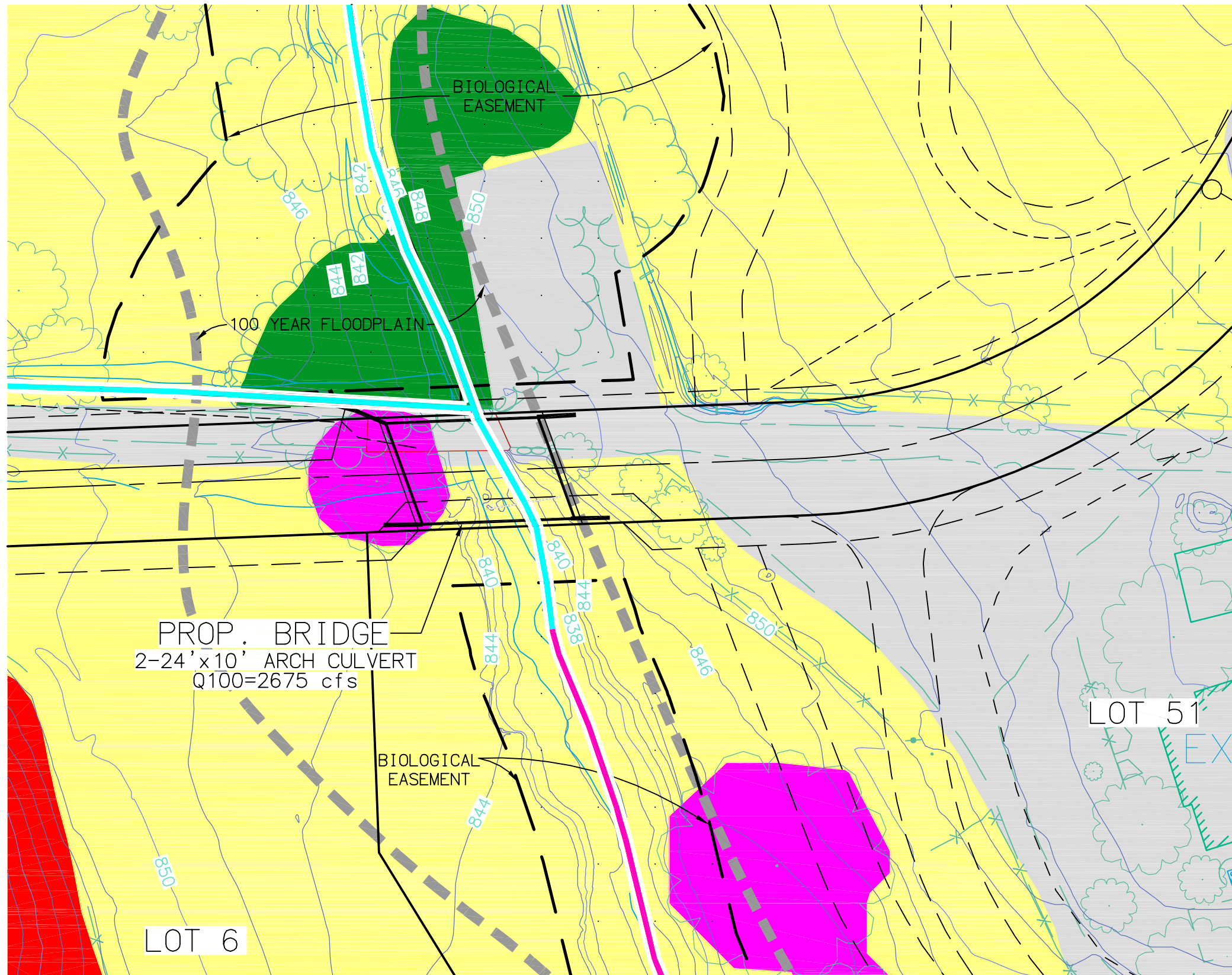
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Source: Helix Environmental Planning Inc., 2006

Figure 3.1-3

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LEGEND

- COAST LIVE OAK WOODLAND
 - AGRICULTURE
 - NON-NATIVE VEGETATION
 - DEVELOPED
 - DIEGAN COASTAL SAGE SCRUB
 - WATERS OF THE U.S.
 - WATERS OF THE U.S./COUNTY WETLANDS
- (SOURCE: HELIX ENVIRONMENTAL)

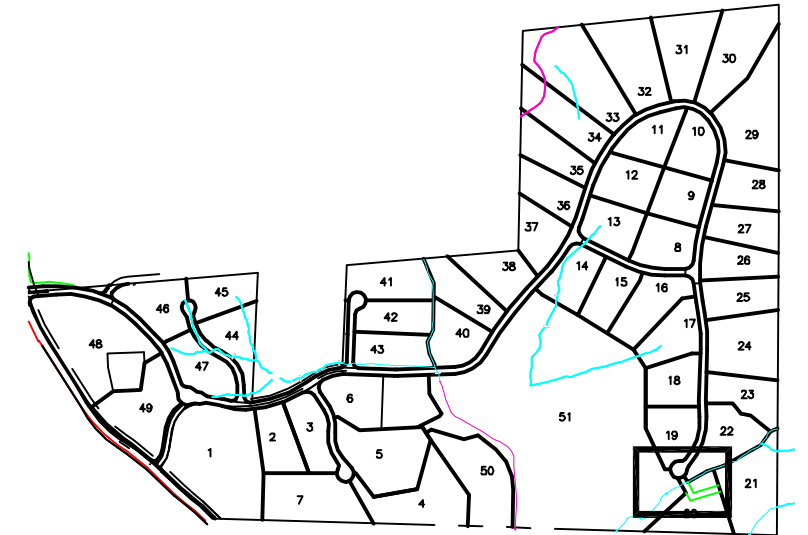
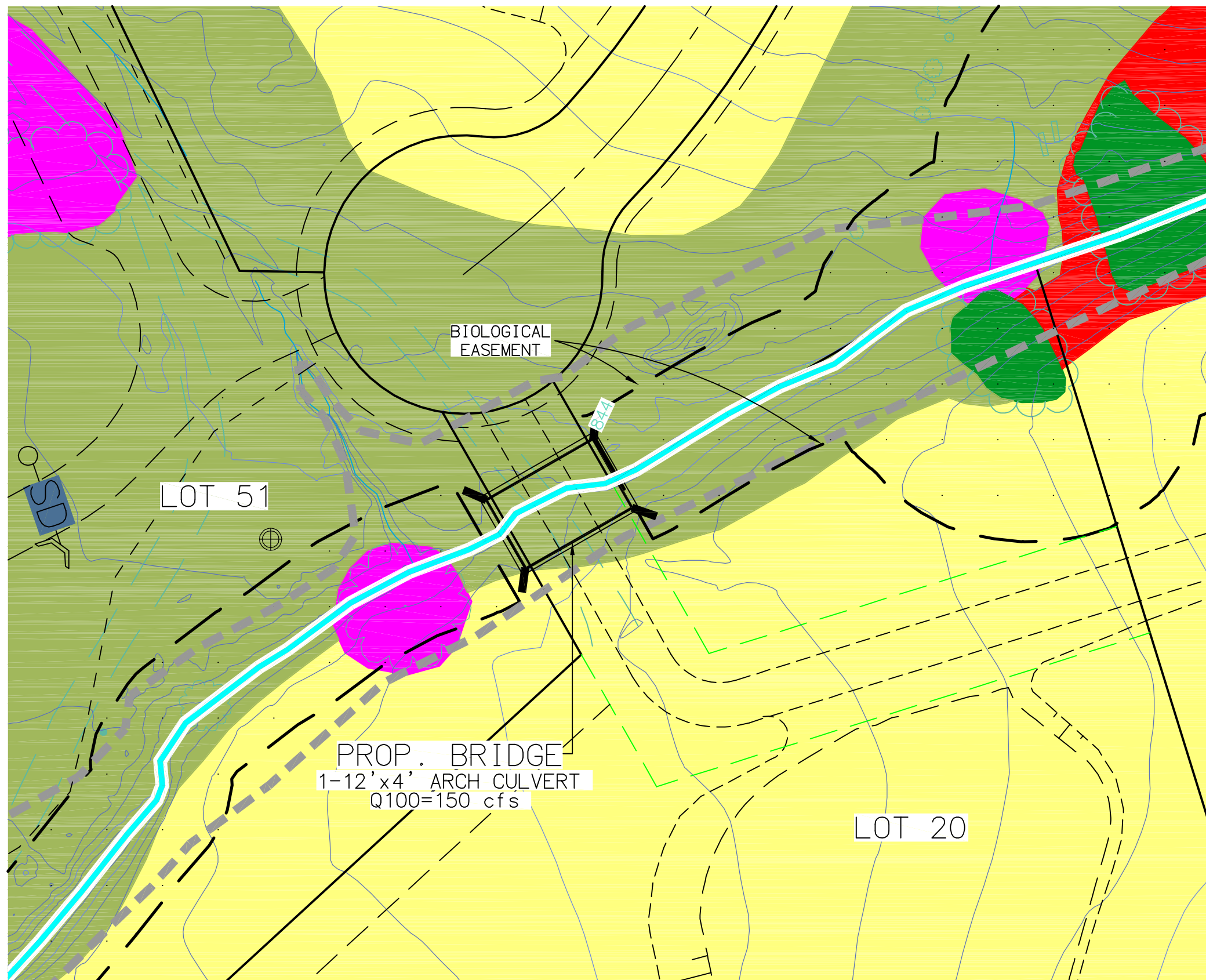
FIGURE 3.1-4

**PEACEFUL VALLEY RANCH ROAD
DRAINAGE CROSSING AT LOTS 6 AND 51**

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LEGEND

- COAST LIVE OAK WOODLAND
 - AGRICULTURE
 - NON-NATIVE VEGETATION
 - DEVELOPED
 - DIEGAN COASTAL SAGE SCRUB
 - NON-NATIVE GRASSLAND
 - WATERS OF THE U.S.
 - WATERS OF THE U.S./COUNTY WETLANDS
- (SOURCE: HELIX ENVIRONMENTAL)

FIGURE 3.1-5

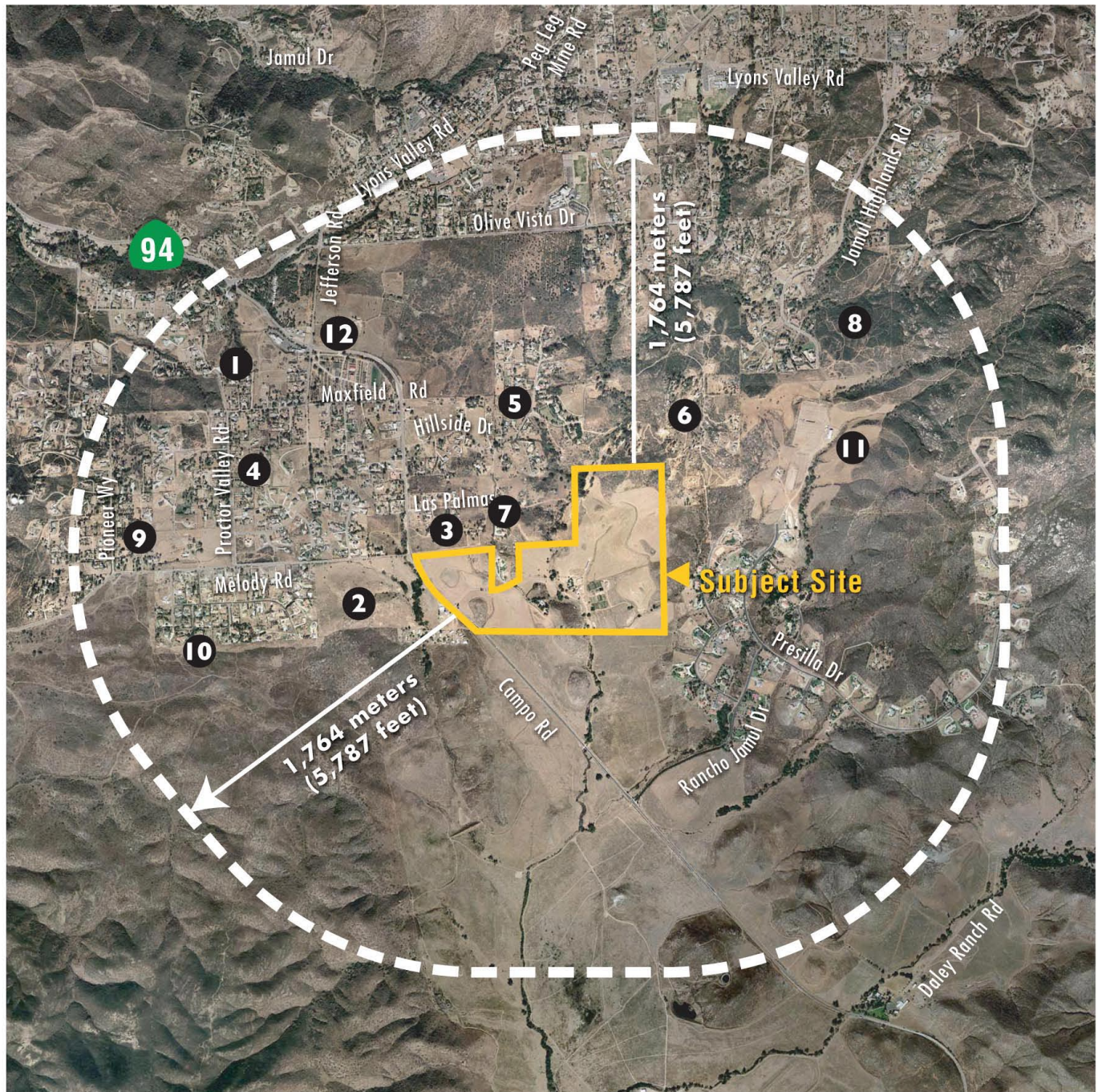
**PEACEFUL VALLEY RANCH ROAD
DRAINAGE CROSSING AT LOTS 20 AND 21**

RBF
CONSULTING

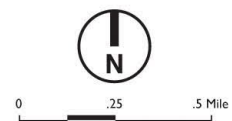
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- | | |
|---|--|
| 1 TPM 20628 RPL1 | 7 TM 5154 RPL1 |
| 2 Jamul Indian Village
Casino Development Project | 8 Jamul Highlands (TM 5289 RPL2) |
| 3 TPM 20599 RPL1 | 9 TPM 20594 |
| 4 TPM 20550 | 10 Otay Ranch - Jamul Rural Estate Area |
| 5 TPM 20868 | 11 Rancho Jamul Estates II |
| 6 P03-101 | 12 TM 5460 Simpson Farms |



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